



# NESSIE

THE LOCH NESS  
MONSTER



OF ALL THE “REAL” MONSTERS that stir the Western imagination, there are few so romantic as the Loch Ness monster. I’m not even slightly immune to that romance. My love affair with Nessie blossomed early and strongly. What could be more wonderful than the idea that a living plesiosaur might slide undetected through the frigid waters of a Scottish lake? I sought out and devoured every book available in my elementary-school and community libraries. As a young boy wishing to learn more in those pre-Google days, I even asked the local reference librarian to track down the address of the Loch Ness Phenomena Investigation Bureau. (Alas, the organization was defunct by the time I tried to contact it.)

In the pulpy books on the paranormal, I studied the famous cases, marveled at the amazing photographs of arching necks and underwater flippers, and absorbed the standard arguments. “Loch Ness is connected to the sea through underwater tunnels,” I told my classmates at recess. (I was unaware that the surface of Loch Ness is more than 50 feet above sea level.) “Do you know why Nessie wasn’t reported until 1933?” I asked on the playground. “Because that’s when they finally built the road beside the loch!” (I now know that the road predates Nessie by more than a century.)<sup>1</sup>

If my understanding of the Nessie literature was a bit uncritical, at least my research techniques were inventive. I remember crouching around a Ouija board in my fifth-grade classroom, pragmatically asking the spirits at which end of Loch Ness I should concentrate my search for the monster. (Or perhaps this was not so innovative. Seven years before my Ouija board consultation, mentalist Tony “Doc” Shiels allegedly led a team of psychics—successfully, he claimed—to summon Nessie and other “aquatic serpent dragons throughout the world.”)<sup>2</sup>

Years later, my love of these wonderful stories led me to the skeptical literature. Eventually, I found myself a magazine writer, which offered me the professional opportunity to pursue my childhood dreams of investigating monster mysteries. And so, it is with great pleasure that I turn now to the enduring mystery of the Loch Ness monster.

## LOCH NESS

Loch Ness is a long, deep lake that lies on a geological fault line—a country-spanning cleft called the Great Glen. Bisecting Scotland from coast to coast, the Great Glen features several large lakes, of which Loch Ness is the



**Figure 4.1** Loch Ness is the largest of the lakes along the Great Glen, which bisects Scotland. Since 1822, these lakes have been linked by the Caledonian Canal, allowing water travel from the North Sea to the Atlantic Ocean across the middle of Scotland. (Image by Daniel Loxton)

largest (figure 4.1). At 22 miles long and around 754 feet maximum depth, Loch Ness is the United Kingdom's largest body of freshwater. It is also, according to legend, the home of an unknown species of large animal. If there is a Loch Ness monster, it is a recent arrival. The steep sides of the loch were scoured by glaciers during the Ice Age of the Pleistocene epoch (2.5 million–11,700 years ago). Indeed, the whole of Scotland was crushed beneath a half-mile-thick sheet of solid ice as recently as 18,000 years ago (or less)!<sup>3</sup>

Today, Loch Ness is connected to the Moray Firth inlet of the North Sea by the 7-mile length of the River Ness (figure 4.2).<sup>4</sup> Since 1822, Loch Ness has been also been part of a shipping channel called the Caledonian Canal.<sup>5</sup> Composed of a series of canals, locks, and natural lakes, the Caledonian Canal allows ships to cross Scotland from coast to coast. The route runs by



**Figure 4.2** Loch Ness is connected to the Moray Firth and the North Sea by two short, parallel waterways: the River Ness and the Caledonian Canal—both of which run through the city of Inverness. (Image by Daniel Loxton)

canal through several locks from Moray Firth to Loch Ness (in parallel to the River Ness), continues down the length of Loch Ness, and then proceeds by canal to Loch Oich (and, eventually, to Scotland's west coast). Thus Loch Ness has been busy and well traveled for almost 200 years. Indeed, Loch Ness was well used and well populated even before the construction of the canal, crossed for centuries by boats and bordered by roads, towns, and villages (and, at the mouth of the River Ness, near the loch's northern end, the sizable city of Inverness). The opening of the canal ushered in a tourism boom, with daily steamship traffic running the length of Loch Ness. "Far from being a lonely, uninhabited spot before 1933," explains Ronald Binns, "Loch Ness was extremely popular with the leisured English middle-classes during the previous hundred years." Even Queen Victoria toured Loch Ness. Almost a century before the birth of the modern monster legend, Loch Ness was already overrun with recreational traffic, according to one disgruntled natural-



ist. He complained bitterly about the noisy, polluting steamboats “full of holiday people, with fiddles and parasols conspicuous on the deck.”<sup>6</sup>

## BEFORE NESSIE

### Water-Horses

As we look toward the emergence of the Loch Ness monster in the 1930s, it is important to understand that a teeming menagerie of water-based supernatural creatures had already lived for centuries in Scottish folklore. In addition to the Great Sea Serpent—such as the Stronsay Beast, whose carcass washed up on the island of Stronsay in 1808 (chapter 5), and the sea serpent sighted in one of the inland freshwater lakes of the northern Isle of Lewis in 1856<sup>7</sup>—Scotland’s feared folkloric monsters include the *boobrie* (a giant carnivorous waterfowl), the *buarach-bhaoi* (a nine-eyed eel that twists its body into a shackle around the feet of prey), the *biasd na srogaig* (a clumsy one-horned water beast with vast legs), and even the twelve-legged “big beast of Lochawe.”<sup>8</sup>

Among this horde of folkloric creatures are the widespread traditions of kelpies (associated with running water), water-bulls, and water-horses (*Each uisge*, which haunted lochs and the sea).<sup>9</sup> Today, these related but distinct mythological creatures are harnessed in service of the legend of the Loch Ness monster, but there are strong reasons to think that this linkage is inappropriate. First, none of these creatures is anything like the modern Loch Ness cryptid. Second, none of them is indigenous to Loch Ness.

In Scottish folklore, water-bulls are small black bulls that are encountered when they venture onto land; they sometimes breed with terrestrial cattle before returning to the water. Water-horses (whether *Each uisge* or the distinct but similar kelpies) are lethal, shape-shifting demons. They are likewise encountered on land in the form of ordinary-looking horses, often with weeds in their manes and wet-looking, adhesive skin. If anyone is foolish enough to climb onto the back of a water-horse, he or she will become stuck in place—and the water-horse will carry the rider screaming into the water. Children are a favorite prey of water-horses. “Often he grazes in a field near the water,” as one historian described the folklore in 1933, “and by his tameness tempts children to mount him. As they mount, he lengthens his back until all are accommodated in a line, when he rushes with them into the water.” (A common folk tale describes a single surviving child who touches the monster and then



**Figure 4.3**

In a tale retold by W. Carew Hazlitt, a ravenous kelpie pursues a beautiful maiden. After a desperate flight, she escapes over the threshold of her house and collapses. Vampire-like, the kelpie is unable to enter the open door because it is protected by a branch from a rowan, a tree believed to offer protection against malevolent beings, but does capture the young woman's shoe, which extended slightly beyond the boundary of magical protection when she fell. (From W. Carew Hazlitt, *Dictionary of Faiths and Folklore: Beliefs, Superstitions, and Popular Customs* [London: Reeves and Turner, 1905], facing 334)

must cut off his own finger to escape. But all his friends are carried off to their deaths.)<sup>10</sup>

Water-horses are much closer to vampires or werewolves than to any modern cryptid (figure 4.3). “When killed, the water-horse proved to be nothing but turf and a soft mass like jelly-fish,” explained an article about the mythical beasts of Scotland, just weeks before the dawn of the Nessie legend. “It could be shot only with a silver bullet, excellent proof of its supernatural character.”<sup>11</sup> Even more vampire-like, water-horses can take human form: “In such form he very often goes courting a young woman, with the entirely unromantic object of eating her.”<sup>12</sup>

Supernatural creatures with no true physical form, water-horses can be identified with modern cryptids only by badly distorting Scottish folklore. They do not act like or resemble Nessie in any meaningful respect. Moreover, they are part of global folklore and have no unique association with Loch Ness. Water-horses are said to lurk in most of the bodies of water in Scotland, including Loch Lomond, Loch Glass, Loch Awe, Loch Rannoch,<sup>13</sup>

Loch Cauldsheils, Loch Hourn, Loch Basibol,<sup>14</sup> Loch na Mna (on the island of Raasay),<sup>15</sup> Loch Garbet Beag, Loch Garten, and Loch Pityoulish.<sup>16</sup> Nor are they restricted to the United Kingdom. According to folklorist Michel Meurger, water-horses “are very widespread: the British Isles, Scandinavia, Siberian Russia, France, Italy, Czechoslovakia, and Southern Slavic countries.”<sup>17</sup> Water-horses were even found in the New World. In 1535, while exploring a tributary to the Saint Lawrence, Jacques Cartier heard that “within this river are some fish shaped like horses, which at night take to the land and by day to the sea, as we are told by our savages.”<sup>18</sup>

#### Hoaxes and Mistakes

The tradition of lake monster and sea serpent hoaxes also long predates the modern Nessie legend. One notable example occurred in upstate New York in 1904—an elaborate hoax involving a carved wooden monster submerged in Lake George by pulleys. (In 1934, the elderly hoaxer revealed the trick and expressed his opinion that Nessie was a similar prank.)<sup>19</sup> Indeed, it seems that monster hoaxing even occurred at Loch Ness in particular, several decades before Nessie. In 1868, a “bottle-nosed whale about six feet long” was found on the banks of Loch Ness. This “monster” caused quite a stir, drawing “large crowds of country people” before it was identified. The *Inverness Courier* concluded that the cetacean “had, of course, been caught at sea, and had been cast adrift in the waters of Loch Ness by some waggish crew” as a prank. “The ruse,” said the newspaper, “was eminently successful.”<sup>20</sup> (Adrian Shine, head of the respected Loch Ness and Morar Project, describes this story as “the earliest reference we’ve found to something more than the Water Horse of legend.”<sup>21</sup> Similar hoaxes have occurred in more recent times: a dead elephant seal was dumped in Loch Ness in 1972 and dead conger eels in 2001.)<sup>22</sup>

Likewise, the history of water monster misidentification is long and well documented, throughout the world and at Loch Ness in particular. In 1852, as reported in the *Inverness Courier*, an armed mob prepared to battle a “sea serpent” at Loch Ness—literally with pitchforks!

One day last week, while Lochness lay in a perfect state of calm, without a ripple on its surface, the inhabitants of Lochend were suddenly thrown into a state of excitement by the appearance of two large bodies steadily moving on the loch, and making for the north side from the opposite shore of Aldourie. Every man, woman and child turned out to be witness to the extraordinary spectacle. Many were the



conjectures as to what species of creation these animals could belong; some thought it was the sea serpent coiling along the surface, and others a couple of whales or large seals. As the uncanny objects approached the shore various weapons were prepared for the onslaught. The men were armed with hatchets . . . the young lads with scythes, and the women principally with pitchforks. One fierce-looking amazon, wielding a tremendous flail about her head, commenced to flagellate a hillock by way of practice. At last a venerable patriarch . . . set to fetch an old [rifle] . . . took aim, and was just on the eve of firing when suddenly he dashed the gun to the ground.<sup>23</sup>

The man cried out in shock at what he took to be supernatural water-horses,<sup>24</sup> but the shock was short-lived. The creatures were “not actually the much dreaded ‘kelpies,’” the newspaper continued, but perfectly ordinary, well-known animals. In fact, “they proved to be a valuable pair of ponies . . . indulging themselves with a dip in the cooling waters of Lochness.” (Remarkably, the animals had swum “fully a mile” across the lake.)

This case brings two salient facts into sharp focus. First, it is possible for people to mistake ordinary animals for mysterious monsters—even crowds of people and even in broad daylight. Second, neither this group of locals nor the *Inverness Courier* gave any hint of an ongoing tradition of monsters in the loch. (All the explanations proposed in the story—sea serpent, whales, seals, and kelpies—are generic. None are specific to Loch Ness.)

Dressed with folklore and mischief, the Loch Ness stage had been prepared for decades—centuries—without any star to step on it. But in the 1930s, all that was to change.

## A SERIES OF SIGHTINGS

### “Three Young Anglers”

This brings us to a small news story from 1930 that may (depending on your point of view) be considered the first modern Loch Ness monster case. According to the *Northern Chronicle*, “three young anglers”<sup>25</sup> had a strange experience while fishing for trout on Loch Ness, as described by Ian Milne, one of the men:

About 8:15 o’clock we heard a terrible noise on the water, and looking around we saw, about 600 yards distant, a great commotion with spray flying everywhere. Then the fish—or whatever it was—started coming toward us, and when it was about 300 yards away it turned to the right and went into the Holly Bush Bay above

Dores and disappeared in the depths. During its rush it caused a wave about 2½ feet high, and we could see a wriggling motion, but that was all, the wash hiding it from view. The wash, however, was sufficient to cause our boat to rock violently. We have no idea what it was, but we are quite positive it could not have been a salmon.<sup>26</sup>

This story is in many ways a bit of a dud. The witnesses did not actually see a monster, and the story died in the news very quickly. (Interestingly, the newspaper also claimed to have spoken with an unnamed “keeper who dwells on the shores of the loch” who “some years ago saw . . . the fish—or whatever it was—coming along the centre of the loch, and afterwards stated that it was dark in color and like an upturned angling boat, and quite as big.” Little was made of this alleged sighting, which was not recorded at the time it occurred.)<sup>27</sup>

But the “three young anglers” story is noteworthy in other ways. It is one of the vanishingly few reports of anything like a Loch Ness monster recorded before 1933. It also is one of the first to use (even if offhand) the term “monster” in relation to Loch Ness. In a skeptical letter to the *Inverness Courier*, someone going under the name Piscator paraphrased Milne’s account as describing “a wave 2½ feet high caused by some unknown monster that, presumably, inhabits Loch Ness.”<sup>28</sup> Retelling the tale in a small item two months later, the *Kokomo Tribune* claimed, “People in the vicinity of Loch Ness, in Scotland, are much mystified over reports of a monster having taken up its abode in the lake.”<sup>29</sup>

#### “Strange Spectacle on Loch Ness”

The “three young anglers” case of 1930 failed to ignite a popular monster legend. But it was remembered by at least one person: a small-town, part-time reporter named Alex Campbell.

Then, in 1933, Campbell heard that his friends Aldie<sup>30</sup> and John Mackay (proprietors of the Drumnadrochit Hotel)<sup>31</sup> had spotted something in the water while driving along the shore of Loch Ness. Campbell wrote the story for the *Inverness Courier*, which ran it under the headline “Strange Spectacle on Loch Ness: What Was It?”

Loch Ness has for generations been credited with being the home of a fearsome-looking monster, but, somehow or other, the “water kelpie,” as this legendary creature is called, has always been regarded as a myth, if not a joke. Now, how-

ever, comes the news that the beast has been seen once more, for, on Friday of last week, a well-known businessman, who lives in Inverness, and his wife (a University graduate), when motoring along the north shore of the loch . . . were startled to see a tremendous upheaval on the loch, which previously had been as calm as the proverbial millpond. The lady was the first to notice the disturbance, which occurred fully three-quarters of a mile from the shore, and it was her sudden cries to stop that drew her husband's attention to the water. There, the creature disported itself, rolling and plunging for fully a minute, its body resembling that of a whale, and the water cascading and churning like a simmering cauldron. Soon, however, it disappeared in a boiling mass of foam.<sup>32</sup>

Presto: Loch Ness was home to a "fearsome-looking monster" and suddenly had been "for generations"!

Campbell's story was a bit on the sensational side. The Mackays clarified their sighting later that year when they spoke with Rupert Gould. First, Aldie was the only one who saw any kind of object or animal; her husband saw only splashing. The article's "tremendous upheaval" was perhaps a little exaggerated: Aldie "thought at first that it was caused by two ducks fighting" (although she decided, "on reflection," that the splashing was "far too extensive to be caused this way"). When she finally saw the cause of the splashing, it was not one body "resembling that of a whale," but two dark humps in the distance. The two humps had a total length (she estimated) of about 20 feet.<sup>33</sup> (If accurate, this would make each hump about the size of a seal. Because Loch Ness is connected to the North Sea by both a river and a canal, seals play an important role in Nessie debates to this day—as we will see.)

Campbell was quick to tie the Mackays' sighting to the "three young anglers" case from three years earlier. In the original version of that story, the three fishermen did not see the cause of the splashing and had "no idea what it was"; in Campbell's revisionist retelling, they saw "an unknown creature, whose bulk, movements, and the amount of water displaced at once suggested that it was either a very large seal, a porpoise, or, indeed, the monster itself!" This was pure embellishment by Campbell. The newspaper account from 1930 contains no hint that the three fishermen suggested a seal, porpoise, or monster as an explanation for the spray or the wave.

In any event, the news of the Mackays' sighting (unimpressive even with the help of Campbell's purple prose) was met with considerable skepticism. In a response to the *Inverness Courier*, steamship captain John Macdonald ex-

pressed exasperation with the Mackays' amateur description of a tremendous upheaval on the loch. "I am afraid," he wrote, "that it was their imagination that was stirred, and that the spectacle is not an extraordinary one." During fifty years of navigating the loch ("no fewer than 20,000 trips up and down Loch Ness"), Macdonald had become familiar with an ordinary occurrence that very closely matched the Mackays' description: "sporting salmon in lively mood, who, by their leaping out of the water, and racing about, created a great commotion in the calm waters, and certainly looked strange and perhaps fearsome when viewed some distance from the scene." Proposed within days, this very plausible explanation for the Mackay case—by most accounts, the original Loch Ness monster sighting—was an event that the steamship captain had "seen many hundred times."<sup>34</sup>

The Mackays' sighting was a weak case by any reasonable standard, but this small, faltering spark would soon flare into perhaps the greatest monster mystery of modern times. Why did the notion of a monster in Loch Ness come to catch the public imagination in 1933, when the "three young anglers" case of 1930 did not? The Mackays' modest story and George Spicer's much more spectacular sighting, which would soon follow it, had something going for them that the "three young anglers" story had not: the release of one of the biggest blockbuster monster films in Hollywood history.

### *King Kong*

Between the Great Depression and the rise of Nazi Germany, media audiences were ready for a diverting popular mystery. The centuries-old folklore traditions of water-horses and sea serpents had the potential to supply such a mystery, but something more was needed—a catalyst.

Hollywood supplied the perfect catalyst at the perfect time: the gigantic, long-necked water monster depicted in *King Kong* (and again in *Son of Kong*, later in 1933). I am not the first researcher to draw a connection between Nessie and *King Kong*. For example, Dick Raynor suggests a link, noting that, as a result of the film, the "entire western world was gripped by monster fever" in early 1933.<sup>35</sup> Ronald Binns agrees that "it is probably no coincidence that the Loch Ness monster was discovered at the very moment that *King Kong* . . . was released across Scotland in 1933."<sup>36</sup> But I think that a stronger relationship between the film and the myth can be asserted than has usually been argued in the past: in essence, that *King Kong* directly inspired the Loch Ness monster.

There is no question that the birth of Nessie correlates closely in time with the release of the film. *King Kong* opened in London on April 10, 1933, just four days before Aldie Mackay's sighting of the "disturbance" in Loch Ness.<sup>37</sup> The film was an instant box-office smash: "Thousands are being turned away from *Kong*," reported the *Daily Express* from Trafalgar Square. Those who did make it into the packed theaters came out "white and breathing heavily." It was a sensation—a monster thriller so real and so terrifying that moviegoers cried out in their seats.<sup>38</sup>

As the notion of a "fearsome-looking monster" at Loch Ness began to quietly percolate, the *Scotsman* marveled at *King Kong*'s success in "giving the impression that its monsters have newly emerged from the primaeval slime." Most important, the film created a viscerally believable illusion of "pre-historic monsters in contact with modern conditions."<sup>39</sup>

These two correlated factors—the sighting by the Mackays and the release of *King Kong*—soon inspired the most influential Nessie report of all time.

"The Nearest Approach to a Dragon or Prehistoric Animal"

A very few vague sightings followed the Mackays' story over the summer of 1933, but those first small embers of popular belief were fading. And then, in August, the legend suddenly burst into incandescence—and the influence of *King Kong* became unmistakable.

On August 4, the *Inverness Courier* published an astonishing letter from a Londoner named George Spicer. He had, he said, recently spotted a strange creature while driving along the shore of Loch Ness with his wife. His description of their spectacular sighting in broad daylight changed the legend forever: "I saw the nearest approach to a dragon or prehistoric animal that I have ever seen in my life. It crossed my road about fifty yards ahead and appeared to be carrying a small lamb or animal of some kind. It seemed to have a long neck which moved up and down, in the manner of a scenic railway, and the body was fairly big, with a high back."<sup>40</sup>

This account, essentially describing a dinosaur strolling across a road in modern Scotland, was (according to one respected Nessie researcher) "so extraordinary it taxed the imagination of even the most confirmed believers."<sup>41</sup> Yet the influence of the Spicer case simply cannot be overstated. As Adrian Shine explains, "There were no records of long neck sightings before the Spicers' encounter on land made the first connection to plesiosaurs."<sup>42</sup>



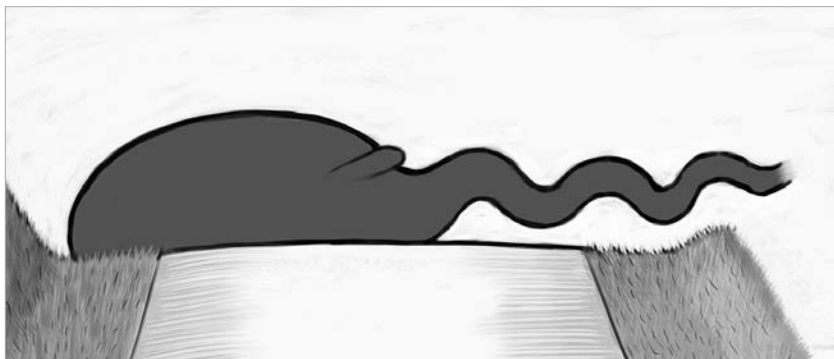


**Figure 4.4** The water monster in a scene from *King Kong*. (Redrawn by Daniel Loxton)

Whereas the few previous witnesses had reported mere splashes or humps in the water, Spicer claimed a close-up view of a long-necked creature that could have been lifted right off of *King Kong*'s Skull Island. And that, I believe, is exactly what happened.

Among the most memorable scenes in *King Kong* is a night attack by a long-necked water monster. As crewmen from the *Venture* raft tensely across a fog-shrouded lake in pursuit of the abducted heroine, something sinister stirs in the water. A dark, swan-like neck arcs out of the water and then slides back out of sight. The men peer through the dense fog, when suddenly the looming neck attacks out of the darkness. The raft is overturned, spilling the men into the lake. In a series of dramatic shots, the huge, plesiosaur-like animal plucks men out of the water and kills them. This creature—with its rounded back, arched neck, and small head—is essentially identical to the plesiosaur-like popular Nessie that would grow out of Spicer's story (figure 4.4). As the remaining *Venture* crewmen scramble to the seeming safety of the shore, they learn a terrible truth: the creature is not an aquatic plesiosaur, but a *Diplodocus*-like sauropod! The monster pursues the men onto land—and, at this point, Spicer's sighting snaps sharply into focus.

In both his description and his sketch, Spicer almost exactly re-created this scene from *King Kong*. Spicer's creature crossed the road from left to right,



**Figure 4.5** The “prehistoric animal” as described by George Spicer. (Illustration by Rupert Gould, under Spicer’s direction; redrawn by Daniel Loxton from Rupert T. Gould, *The Loch Ness Monster* [1934; repr., Secaucus, N.J.: Citadel Press, 1976])

just as the *Diplodocus* on land crosses the movie screen (figure 4.5). As Spicer’s beast “crossed the road, we could see a very long neck which moved rapidly up and down in curves . . . the body then came into view”;<sup>43</sup> for its part, the somewhat implausibly writhing neck of the film’s dinosaur enters first, followed by its huge body. The movie’s creature gives the impression of having gray, elephant-like skin; Spicer’s creature had gray skin, “like a dirty elephant or a rhinoceros.”<sup>44</sup> The 30-foot Loch Ness beast is of roughly similar size to the movie monster: “When it was broadside on it took up all the road. . . . It was big enough to have upset our car. . . . I estimated the creature’s length to be about 25–30 feet.”<sup>45</sup>

A few other diagnostic details make the case especially compelling. In the shots from the movie, the sauropod’s feet are not visible. (For ease of animation, they are shielded from view by bushes and enshrouding fog.) Likewise, in Spicer’s version, “We did not see any feet.” Especially striking is the profile that the two creatures have in common. The film’s *Diplodocus* is shown with its tail curved out of view around the far side of its body. According to Spicer’s description of his monster, “I think its tail was curved round the other side from our view.”<sup>46</sup>

Finally, there is the troublesome description in Spicer’s letter to the *Inverness Courier* that the monster “appeared to be carrying a small lamb or animal of some kind.”<sup>47</sup> Later, paraphrased versions of his story suggested that the “lamb or animal” could refer to the end of the creature’s tail sticking up above its shoulder (or perhaps something riding on the monster’s back); but, at face

value, this appears to be a direct description of the last shot in *King Kong*'s sauropod scene. Reaching into a tree, the dinosaur grabs a surviving crew member in its mouth and shakes him. In a shot that exactly matches Spicer's sketch, the doomed man looks exactly like a "small lamb or animal of some kind" in the monster's mouth!

This is not the first time that a similarity between the film and the sighting has been noted. Rupert Gould discussed *King Kong* with Spicer just months after the sighting: "While discussing his experience, I happened to refer to the diplodocus-like dinosaur in *King Kong*: a film which, I discovered, we had both seen. He told me that the creature he saw much resembled this, except that in his case no legs were visible, while the neck was much larger and more flexible."<sup>48</sup> But despite the red flag of Spicer's admission that he had seen *King Kong* and that his creature looked like the monster in the film (and even though the obscuring of the creature's legs and feet was a striking detail that the sighting and the film version shared), Gould seems to have moved on without further comment. More recently, Shine's always thorough research zeroed in on both the pivotal importance of Spicer's story (being, once again, the original report of a long-necked monster at Loch Ness) and the significance of Spicer's discussion of *King Kong*.<sup>49</sup> "I believe personally that *King Kong* was the main influence behind the 'Jurassic Park' hypothesis at Loch Ness," Shine confirmed, when asked about the likelihood of a connection. "Before Spicer's land sighting there were no long neck reports at all and it was the long neck that was so crucial."<sup>50</sup> Shine does not seem to have specified the details of the similarities in print, however, and most researchers overlook this smoking gun altogether.

What we are left with is familiar to critical researchers of other paranormal topics, such as UFOs: a feedback loop among popular entertainment, news media, and paranormal belief. The Loch Ness monster grew out of an existing genre of fictional encounters between modern humans and prehistoric creatures (plesiosaurs and sauropods, in particular). Audiences for the hit silent film *The Lost World* (1925) watched a *Diplodocus* rampage through the streets of London and those for *King Kong* saw another stop-motion sauropod dinosaur attack a raft full of men. These fictional stories prepared the public imagination to accept similar "true" stories that the press happily publicized. The press hype ensured further public interest, which inevitably generated more reports. Some were hoaxes, of course, but many were mistakes generated by expectant attention. In 1934, Gould gravely noted "the undoubted fact that,

in proportion, as more people looked for the ‘monster,’ more people saw it.”<sup>51</sup> Then, popular fiction stepped in to recursively capitalize on the media-based monster of Loch Ness. The first feature film version, *The Secret of the Loch*, hit theaters less than a year after Spicer’s sighting! (Almost inevitably, the lead character declares the Loch Ness monster to be—what else?—a *Diplodocus*.)

“Horrible Great Beast”

Triggered by the Spicer case, a wave of new sighting reports poured in. The sheer number of accounts not only seemed to show that the monster was real, but also exposed a critical flaw in the newly minted legend. “There is one vital question regarding it which must always cause warrantable doubt,” one writer nailed it in 1938. “Why have we heard of it only within the last five years or so, when there is no authenticated record of its existence in the centuries which have gone?”<sup>52</sup>

While news coverage asserted a “traditional Loch Ness ‘monster’—a superstition which has existed for generations,”<sup>53</sup> knowledgeable locals refuted these media claims. Scolding the *Inverness Courier* in 1933, steamship captain John Macdonald wrote, “It is news to me to learn, as your correspondent states, that ‘for generations the Loch has been credited with being the home of a fearsome monster.’”<sup>54</sup>

A genuine monster should imply a history of monster sightings. Where were they? Seeking such a history, people turned to old sources—and old memories—in search of support. Newspapers carried many letters like this one from the Duke of Portland:

Sir,—The correspondence about “the Monster” recently seen in Loch Ness reminds me that when I became the tenant in 1895, nearly forty years ago, of the fishings in the River Garry and Loch Oich, the ghillies, the head forester, and several other individuals at Invergarry often discussed a “horrible great beast,” as they termed it, which appeared from time to time in Loch Ness. None of them, however, claimed to have seen it themselves, but each one knew individuals who had actually done so.<sup>55</sup>

It is difficult even to know what to say about this story. After the media hype started, the duke came forward to say that he remembered that forty years earlier, he had heard some hearsay about a monster? Rupert Gould rather understated the provenance problem when he said of this claim, “Although interesting, such stories are of no great value as evidence.”<sup>56</sup> Yet, to this day, many Loch Ness monster sources include this story, without comment, as a

firsthand sighting in 1895 by multiple witnesses.<sup>57</sup> Other similarly backdated tales, about alleged but unrecorded events or hearsay from decades earlier, are interspersed with older stories of uncertain or unlikely relevance to create a fictional time line of Nessie prehistory. Some early references included on the canonical time line are invented from whole cloth. For example, one full-page article in the *Atlanta Constitution* is rumored to have described a modern Loch Ness monster (complete with woodcut illustration) in the 1890s. This would be important if true, but it appears that the article never existed. (All attempts to locate it have failed.)<sup>58</sup>

Despite this fictive history, the truth is that unambiguous Nessie sightings did not exist before the release of *King Kong* and the subsequent media hype. Some monster proponents confront this state of affairs honestly. With the possible exception of the “three young anglers” case, writes Henry Bauer, “I can produce nothing written before 1933 that unequivocally refers to large, nonmythical animals in Loch Ness.”<sup>59</sup>

Still, as 1933 wore on and reports of sightings of the Loch Ness monster accumulated, people found apparent corroboration in the form of supernatural folklore. To begin with, there were the kelpie traditions, notwithstanding that they are hardly exclusive to Loch Ness. But enthusiasts soon unearthed a more specific tale that appeared to establish Nessie’s antiquity.

#### THE STORY OF SAINT COLUMBA

Within an early medieval biography called *The Life of Saint Columba*, there is a brief but exciting description of a Catholic saint’s confrontation with a “water beast” at the River Ness. Now considered the canonical “first recorded sighting” of the Loch Ness monster, this anecdote is said to establish a provenance for Nessie that dates back 1,300 years. Unfortunately, there are good reasons to suspect that this encounter never occurred.

Columba (ca. 521–597) was an Irish monk who in 563 traveled to Scotland as a missionary and established a monastery on the island of Iona. About a century after Columba’s death, Adomnán, the ninth abbot of Iona, wrote a biography of his predecessor. This fascinating work is considered one of the most important windows into early Scottish culture, so it is not surprising that monster proponents wish to claim it.

The story goes like this: Columba and his monks encountered some locals conducting a burial at the river’s edge. When he asked what had happened, Columba was told that a terrible beast had killed a swimmer. Hearing this,

Columba directed one of his companions to swim across the river and fetch a boat from the other side. The monk obediently leaped into the water:

But the beast, not so much satiated by what had gone before as whetted for prey, was lurking at the bottom of the river. Feeling the water above it disturbed by the swimming, and suddenly coming up to the surface, it rushed with a great roaring and with a wide-open mouth at the man swimming in the middle of the stream-bed. On seeing this, the blessed man, together with all who were there—the barbarians as much as the brethren being struck with terror—drew the sign of the saving cross in the empty air with his upraised holy hand. Having invoked the name of God, he commanded the ferocious beast, saying, “Go no further! Nor shall you touch the man. Turn back at once.” Then indeed the beast, hearing this command of the holy man, fled terrified in pretty swift retreat, as if it were being hauled back with ropes; though just before this it had approached the swimming [monk] so closely that, between man and beast, there had not been more than the length of a small boat-pole.<sup>60</sup>

This does sound like a powerful endorsement for the legend of the Loch Ness monster. But this superficial resemblance between the river monster and Nessie is a coincidence and is profoundly useless as evidence. The problem is that Adomnán’s *Life of Saint Columba* is a hearsay-based biography of a man whom Adomnán never met—a larger-than-life historical figure who was, by Adomnán’s day, already shrouded in legend. Drawing from monastic documents, local folklore, second- (and third- and fourth-) hand testimony, and travelers’ tales from faraway lands, Adomnán collected hundreds of unrelated and mostly implausible anecdotes—some as short as two unsupported sentences. He had no way even to put them in chronological order. Each story simply begins “At another time . . .” or “On another day. . .”

Like other early medieval hagiographic literature, *The Life of Saint Columba* is packed with magic, monsters, and spine-tingling supernatural forces. In addition to making prophecies and performing healing miracles, Columba is said to have calmed storms, turned water into wine, summoned water from a stone, driven out “a Demon that Lurked in a Milk-pail,” raised the dead, enchanted a stick so that wild animals would impale themselves on it every night, comforted a weeping horse as it “shed copious tears”—and so on. The water beast story is but one of several animal-related anecdotes, each showing the saint’s holy power over wild beasts (a boar, a water beast, poisonous snakes). In this context, concluded historian Charles Thomas, the monster



tale emerges as just “one minor literary trope within a deliberate and overt piece of religious propaganda.”<sup>61</sup> Worse, the story was a cliché. As Thomas points out, medieval hagiographies very often include saintly adventures “in which snakes, or serpents, or dragons—terrestrial or aquatic, with or without wings, silent or bellowing—figured as stock properties in every variety of resuscitation or repulsion miracle.”<sup>62</sup>

The bottom line is that no one knows what Columba saw. Indeed, there is no reason to think that this encounter happened. No one knows where the story came from, and it cannot be used as evidence of anything.

Unfortunately, Thomas was right when he wrote that it was “too much to hope that future writers on the topic of the Loch Ness Monster will abandon this reference as irrelevant and misleading.”<sup>63</sup> Today, more than twenty years later, virtually all Loch Ness monster sources continue to showcase Saint Columba’s as the “first recorded Nessie sighting”—the centerpiece of a revisionist time line cobbled together from “sightings” that entered the record (as decades-old or even millennia-old hearsay) only after the start of the Nessie media circus.

#### THE EMERGENCE OF THE “PLESIOSAUR HYPOTHESIS”

Inspired by the sauropod dinosaur in *King Kong*, George Spicer created the legend of a long-necked monster at Loch Ness. In turn, his yarn gave rise to many other dinosaur-like and plesiosaur-like sightings. Promoted in news reports and supported by photographs of alleged monsters, these eyewitness accounts made the “plesiosaur hypothesis” a favorite explanation for Nessie throughout the twentieth century.

The groundwork for this notion had been laid as early as 1833, when naturalists began to suggest that a surviving population of prehistoric marine reptiles (known from newly discovered fossils) could be the best explanation for sea serpent sightings.<sup>64</sup> The idea received a big boost from an immensely popular science writer named Philip Henry Gosse in 1861.<sup>65</sup> The concept of surviving plesiosaurs was further popularized in widely read science-fiction stories, such as Jules Verne’s *Journey to the Center of the Earth* (1864). Science-fiction writers even relocated the marine reptiles to freshwater lakes. One short story, “The Monster of Lake LaMetrie” (1899) by Wardon Allan Curtis, features a violent encounter between a scientist and an *Elasmosaurus* that has been cast up from the hollow center of Earth (figure 4.6).<sup>66</sup> Familiar



**Figure 4.6** The skull of an elasmosaur at the Courtenay and District Museum and Palaeontology Centre, Courtenay, British Columbia. (Image by Daniel Loxton)

as we are with the conceit of a Loch Ness plesiosaur, these stories now read as clear foreshadowing of the Nessie narrative and the cryptozoological hopes that it embodies. Consider this passage from Arthur Conan Doyle's runaway hit *The Lost World*:

Here and there high serpent heads projected out of the water, cutting swiftly through it with a little collar of foam in front, and a long swirling wake behind, rising and falling in graceful, swan-like undulations as they went. It was not until one of these creatures wriggled on to a sand-bank within a few hundred yards of us, and exposed a barrel-shaped body and huge flippers behind the long serpent neck, that Challenger, and Summerlee, who had joined us, broke out into their duet of wonder and admiration.

"Plesiosaurus! A fresh-water plesiosaurus!" cried Summerlee. "That I should have lived to see such a sight! We are blessed, my dear Challenger, above all zoologists since the world began!"<sup>67</sup>

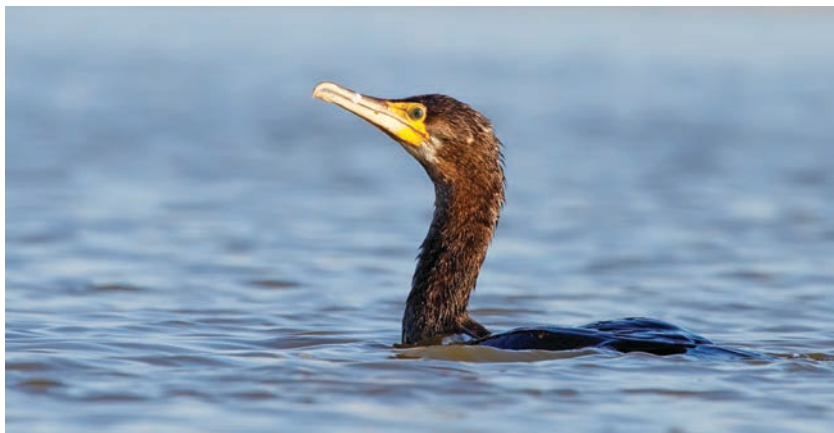
Perhaps not coincidentally, the speculation that a population of plesiosaurs could have survived in the oceans was advocated in 1930 by Rupert Gould,<sup>68</sup> who went on to write the first and most influential book about the Loch Ness monster! The notion that Loch Ness, in particular, might shelter plesiosaurs was raised as early as August 9, 1933, immediately following Spicer's sighting of a long-necked monster. Linking Nessie to sea serpents, the *Northern Chronicle* argued that there can be little doubt that the Loch Ness creature

“is a surviving variant of the Plesiosaurus.”<sup>69</sup> Strangely enough, it was Alex Campbell, the author of the *Inverness Courier*’s original Aldie Mackay sighting story, who pushed the plesiosaur idea the hardest. Having written the canonical first Loch Ness monster news story and conjured up the fakelore that “Loch Ness has for generations been credited with being the home of a fearsome-looking monster,” Campbell went on to claim that he personally had seen a plesiosaur in Loch Ness—multiple times.

In October 1933, Campbell and his neighbor told reporter Philip Stalker that they had experienced spectacular sightings of the monster.<sup>70</sup> Stalker wrote that these “men whose honesty and reliability have never been called in question” described the creature as “being of the same form as a prehistoric animal: resembling most nearly the plesiosaurus. That is to say that they described its form, and when shown a sketch of a plesiosaurus stated that was the kind of animal they had seen.”<sup>71</sup> Stalker went on to report Campbell’s detailed claim that “one afternoon a short time ago he saw a creature raise its head and body from the loch, pause, moving its head—a small head on a long neck—rapidly from side to side, apparently listening. . . . While it was above water, he said, he could see the swirl made by each movement of its limbs, and the creature seemed to him to be fully 30 feet in length.”<sup>72</sup> This was, Stalker admitted, “a description which, to anyone who is at all sceptical, must appear to be very fantastic.” Skepticism was, we know now, entirely appropriate: Campbell retracted his story just days after Stalker publicized it! In a letter, Campbell explained that his spectacular 30-foot plesiosaur was just a group of ordinary waterbirds:

I discovered that what I took to be the Monster was nothing more than a few cormorants, and what seemed to be the head was a cormorant standing in the water and flapping its wings as they often do. The other cormorants, which were strung out in a line behind the leading bird, looked in the poor light and at first glance just like the body or humps of the Monster, as it has been described by various witnesses. But the most important thing was, that owing to the uncertain light the bodies were magnified out of all proportion to their proper size.<sup>73</sup>

Campbell’s role in the development of the Nessie legend was absolutely pivotal, but it soon descended into farce. Having admitted that the long-necked creature “fully 30 feet in length,” with its head held “fully 5 feet above the water,” was just a flock of cormorants (figure 4.7), Campbell then went on in 1934 to claim a nearly identical sighting of a creature “30 ft. long” with a



**Figure 4.7** Waterbirds, such as the plesiosaur-like cormorant, are a frequent source of false-positive sightings of cryptids. (© Stockphoto.com/Jesús David Carballo Prieto)

“swanlike neck reached six feet or so above the water”!<sup>74</sup> By itself, the sheer implausibility of this coincidence seems to disqualify Campbell’s testimony (and, by extension, all later plesiosaur sightings following his example) from serious consideration. But Campbell was not done: he eventually claimed a whopping eighteen sightings of the Loch Ness monster—often close up and sometimes of multiple creatures at one time. (In one of these entertaining adventure tales, his rowboat was lifted into the air on the monster’s back!)<sup>75</sup>

We will return to the “plesiosaur hypothesis” later in this chapter. For now, we should pause to discuss the variability of eyewitness descriptions of the monster. “It seems quite clear, from the inquiries which I made between Inverness and Fort Augustus,” wrote Stalker, “that the many observers . . . are divided, broadly-speaking, into two sections.” On the one hand, there were those “who have seen a long greyish-black shape, evidently the back of a creature”; on the other, “there are those who have . . . described its head and neck and form as resembling a plesiosaur.”<sup>76</sup> In dividing witnesses into these two camps, Stalker both captured and dramatically understated this critical problem. As F. W. Memory, writing in the *Daily Mail*, explained, “Hardly two descriptions tallied, and the monster took on both curious and fantastic shapes—long neck, short neck . . . one hump, two humps, even eight humps, and no humps at all! In fact, it rivals the most versatile quick-change artist of

the vaudeville stage in the appearances it was able to assume between one viewing and another.”<sup>77</sup>

This variability of description leads researchers in radically divergent directions. If it is true that “the most striking feature about the Loch Ness ‘monster’—one which differentiates it from all other known living creatures—is a very long and slender neck, capable of being elevated very considerably above the water-level,”<sup>78</sup> as Gould concluded, then this leads the investigation in one direction. If, instead, the creature has “a massive bull-like head set on a very thick neck, not unlike that of a seal or sea lion,”<sup>79</sup> then the search takes an entirely different turn.

#### MONEY AND THE MONSTER

The commercial potential of the Loch Ness monster was obvious from the first—so obvious, indeed, that the Scottish Travel Association found it necessary to issue a denial: “[C]ontrary to rumours which are circulating, the Loch Ness ‘monster’ was not ‘invented’ by this Association as a means of publicity for bringing people to Scotland.”<sup>80</sup> Yet, such is Nessie’s value as an attraction that rumors of deliberate tourism-related fraud continue to circulate. (It seems that even Joseph Goebbels, the Minister of Propaganda in Nazi Germany, argued that Nessie was a hoax created by British tourism agencies.)<sup>81</sup>

There seems little need to conjure a central conspiracy when good humor, expectation, and simple human error could so easily provide ample fuel to spark a monster myth. The Nessie legend seems to have emerged in a sporadic, haphazard, and organic manner, with free enterprise simply seizing the opportunity. And what an opportunity it was! As the *Daily Express* explained in December 1933:

It’s an industry. It is Scotland’s answer to the Taj Mahal, New York Empire State Building, Carnera, and Ripley, believe it or not. Many newspapers in many countries are doing all they can for it. Scotland is in the front-page news day by day. . . . When the winter sun pales on the Mediterranean the Riviera has no attraction left. Loch Ness can defy all weather, seasons, ages with this fellow. He’s a monster advertisement—whether he’s there or not.<sup>82</sup>

Travel companies leaped into the Nessie industry, aggressively promoting commercial train and bus tour packages.<sup>83</sup> Loch-side bus traffic became so excessive in 1934 that special safety rules had to be introduced.<sup>84</sup> And

while Nessie brought crowds of visitors to Scotland, the monster could also be exported as popular entertainment. In addition to appearances on radio programs and in comic strips, Nessie splashed immediately onto the silver screen. For example, a British Pathé variety short presented a pop song called “I’m the Monster of Loch Ness” in January 1934.<sup>85</sup> Amazingly, “a new ‘talkie’” feature film, *The Secret of the Loch*, was announced, shot, and released before the end of that year.<sup>86</sup>

Nessie was put to work as a sales monster as well. Advertisers raced to print Nessie-themed campaigns for consumer products from mustard to floor polish to breakfast cereal.<sup>87</sup> Nessie merchandising also exploded immediately. In January 1934, a parade featuring a 17-foot-long monster escorted by bagpipers ushered three sizes of a cuddly velveteen toy called Sandy, the Loch Ness Monster, into Selfridges, a posh department store.<sup>88</sup> A series of large advertisements and cash contests urged children to “Join the Monster Club” by purchasing a wooden puzzle toy called Archibald: The Loch Ness Monster.<sup>89</sup> Rubber beach toys were rushed into production in anticipation of the 1934 tourist season.<sup>90</sup>

The humor of the Nessie industry was not lost on commentators. As one headline put it, “Monster Bobs Up Again . . . Hotels Doing Fine.”<sup>91</sup> Another noted, “There have, of course, been unworthy suggestions that, as a major and unique tourist attraction, she is being very strictly preserved from any undue scientific de-bunking, by those who recognize her value as an invisible export.”<sup>92</sup>

## A PARADE OF PHOTOGRAPHS

### The Hugh Gray Photograph

The era of Loch Ness monster photography began in November 1933, when a British Aluminium Company employee named Hugh Gray was walking home from church along Loch Ness. Spotting the monster close to the shore, Gray apparently took five photographs, four of which showed nothing.<sup>93</sup> But the fifth photo showed—something wiggly? Or maybe not?

When Rupert Gould wrote that Gray’s photo, “although indefinite, is both interesting and undoubtedly genuine,” he rather understated the “indefinite” part.<sup>94</sup> The alleged monster photo is genuinely terrible (figure 4.8). Its status as the first photograph of Nessie makes it worth mentioning, but it could show anything. To appreciate the true ambiguity of this photograph, consider



**Figure 4.8** The first photograph alleged to depict the Loch Ness monster, taken by Hugh Gray in November 1933. (Reproduced by permission of Fortean Picture Library, Ruthin, Wales)

that at least one book has printed it upside down.<sup>95</sup> Some researchers wisely refuse to argue on the basis of the photo. “I believe the picture is probably a genuine photograph of one of the aquatic animals in Loch Ness,” said Roy Mackal (on the strength of Gray’s verbal testimony). “However, objectively, nothing decisive can be derived from this picture. There is no apparent basis for determining which is front or back, and any such decisions must depend largely on what preconceptions one may have.”<sup>96</sup>

While no source can claim any reliable insight into the identity of Gray’s monster, I confess that I can see only one thing: a yellow Labrador retriever, swimming toward the photographer. Once this interpretation was pointed out to me,<sup>97</sup> I found it impossible to un-see it. However, I cannot remotely prove that the photo depicts a dog, and this interpretation has been critiqued as pareidolia (the human tendency to perceive bogus patterns—especially faces—in random noise). At the same time, neither can anyone else prove anything on the basis of this picture. In and of itself, Gray’s photograph has negligible evidential value.

Is there circumstantial evidence that could shed light on the matter? Perhaps. One reason for suspicion is that Gray reported at least six Nessie sight-



ings,<sup>98</sup> of which his photo was the second.<sup>99</sup> When one witness announces multiple, even habitual, sightings of an elusive cryptid, I regard this as a huge red flag. Think of the millions of people who have visited Loch Ness, the thousands who live and work around it, and the organized observation campaigns that have failed to catch any glimpse of the monster. Yet, inexplicably, certain names turn up repeatedly in the Loch Ness sighting record. Of these witnesses, some have admitted to misidentification errors (Alex Campbell disavowed at least one of his eighteen sightings), while others have been caught cheating. For example, Nessie researcher Frank Searle produced an absurdly lucky streak of photographs before his fellow monster hunters proved that he was a hoaxer. (Some of his fake photos showed parts of a painted sauropod dinosaur blatantly cut out of a postcard.) After Searle was exposed, tensions rose to such a point that he allegedly firebombed a Loch Ness and Morar Project expedition. No one was hurt, and he soon left the area.<sup>100</sup> Today, Searle is universally remembered as a fraud.

For his part, Gray also sighted Nessie with suspicious frequency—and there is a seemingly implausible convenience to his photograph as well. Walking home after church, he said, “I had hardly sat down on the bank when an object of considerable dimensions rose out of the loch two hundred yards away. I immediately got my camera into position and snapped the object which was two or three feet above the surface of the water.”<sup>101</sup> Then, having successfully captured, at close range, history’s first photograph of the Loch Ness monster, Gray apparently went home and left the film in a drawer for almost three weeks.<sup>102</sup>

Was Gray’s photograph a hoax? I don’t know, but the smart money would not bet any other way.

#### March of the Hippopotamus

In December 1933, the *Daily Mail* dispatched a special investigator to Loch Ness to get to the bottom of the mystery: “big-game hunter” Marmaduke Wetherell. Almost as soon as he arrived, Wetherell announced that he had discovered (and cast in plaster) the monster’s footprints on the shore of the loch. This struck some observers as a little convenient. “I am aware,” Wetherell acknowledged in an interview, “that it is suggested that I have had phenomenal luck in finding such definite traces in two days, although others have failed after a long search.”<sup>103</sup> Still, it was an astonishing find. In a BBC

interview (produced, as it happened, by Peter Fleming, the brother of the creator of James Bond),<sup>104</sup> Wetherell said, “You may imagine my great surprise when on a small patch of loose earth I found fresh spoor, or footprints, about nine inches wide, of a four-toed animal. Its prints were very much like those of the hippo.”<sup>105</sup>

Recalling this interview, Fleming described Wetherell and his assistant as “transparent rogues” whose “account of their discoveries carried little conviction.” Wetherell struck Fleming as “a dense, fruity, pachydermatous man in pepper-and-salt tweeds.”<sup>106</sup> These ad hominem attacks are in keeping with the portrait painted by researchers David Martin and Alastair Boyd. Wetherell was “an eccentric, a likeable rogue, a master of hoaxes, a vain attention seeker.” They found that he was not, however, “as the literature would have it, merely a big-game hunter. He was primarily a film director and actor.”<sup>107</sup> A mid-level showman, in short—and, with his monster footprints, a showman in the spotlight.

But it was not to last. The cast of the footprints was sent to the Natural History Museum in London, where it was studied by the head of the Department of Zoology and other scientists. These experts identified it easily enough: “We are unable to find any significant difference between these impressions and those made by the foot of a hippopotamus.” Nor did the prints of the monster match those of a living hippo that the museum had cast at the zoo for comparison. Wetherell’s tracks had been made by using a “dried mounted specimen.”<sup>108</sup> The footprints were a hoax, and Wetherell himself had offered the first hint.

In 1999, Martin and Boyd revealed, “Marmaduke Wetherell planted the hippo footprints himself” by using a “silver cigarette ashtray mounted in a hippopotamus foot.” The ashtray still exists, in the possession of Wetherell’s grandson Peter.<sup>109</sup>

Saying that he “could not account” for the fake footprints, Wetherell soon announced that the Loch Ness monster was a seal—and left the area. But his role in the Nessie story was far from over.

#### The Surgeon’s Photograph

On April 21, 1934, the *Daily Mail* published a stunning new photograph of the Loch Ness monster, allegedly taken by a gynecologist named Robert Kenneth Wilson. Referred to today as the Surgeon’s Photograph, this is unquestionably



**Figure 4.9** The hauntingly indistinct, close-cropped standard version of the Surgeon's Photograph, taken in April 1934. (Reproduced by permission of Fortean Picture Library, Ruthin, Wales)

the most famous Nessie image ever produced (and an icon for cryptozoology in general) (figure 4.9).<sup>110</sup> With a few exceptions, Roy Mackal wrote in 1976, “every student of the Loch Ness phenomena . . . has accepted this picture as depicting the head-neck of a large animal in Loch Ness.”<sup>111</sup>

Contemporary critics were quick to propose alternative explanations. “I got a copy of the original from the *Times*,” wrote legendary paleontological explorer Roy Chapman Andrews, “and it showed just what I expected—the dorsal fin of a killer whale.”<sup>112</sup> Others suggested, plausibly enough, that the photograph depicted a diving otter or waterfowl. However, it is now known that the photograph was a hoax. In 1975, the *Sunday Telegraph* printed a short article in which Ian Wetherell, the sixty-three-year-old son of Nessie hippo-foot hoaxer Marmaduke Wetherell, revealed that the Surgeon's Photograph was actually another Wetherell family hoax, created by using a small model monster built around a toy submarine: “So my father said, ‘All right, we’ll give them their monster.’ I remember that we drove up to Scotland. . . . I had the camera, which was a Leica, and still rather a novelty then. . . . We found an inlet where the tiny ripples would look like full size waves out of the loch, and with the actual scenery in the background. . . . I took about five shots with the Leica . . . and that was that.”<sup>113</sup> After the photo shoot with the model, Marmaduke Wetherell

handed off the film to Maurice Chambers, a collaborator who passed it to Wilson, who submitted it to the newspaper—and history was made.

Strangely, Ian Wetherell's public confession in 1975 remained little known for many years.<sup>114</sup> In 1990, Adrian Shine dug out the forgotten article and set researchers David Martin and Alastair Boyd on the trail. By this time, both Marmaduke and Ian Wetherell were dead, but the search led them to Marmaduke Wetherell's stepson, an elderly gentleman named Christian Spurling. Spurling confirmed Ian Wetherell's claim: "It's not a genuine photograph. It's a load of codswallop and always has been."<sup>115</sup> Spurling and Ian Wetherell had built the monster model together.

For his part, Wilson was always cagey about "his" famous picture. He hinted to researchers that "there is a slight doubt or suspicion as to the authenticity of the photograph."<sup>116</sup> He insisted, "I have never claimed that this photograph depicts the so-called 'Monster.' . . . In fact I am unconvinced and intend to remain so."<sup>117</sup> Moreover, some witnesses have said that Wilson had confessed to the hoax. One such was a friend of Wilson's named Major Egginton, who had served under Wilson in the military. In 1970, Egginton told a young Nessie researcher named Nicholas Witchell,

I always recall the occasion when in 1940 my late Colonel (of the Gunners) Lt. Col. R. K. Wilson, who was before the War a Harley Street specialist, told three of us, quietly in the mess how he and a friend had hoaxed the local inhabitants of Loch Ness. His friend with whom he used to fish the loch from time to time . . . had apparently superimposed a model of a monster on the plate. . . . [T]he resulting publicity according to "R. K." so scared them that it was kept very quiet.<sup>118</sup>

The "friend with whom he used to fish" was Chambers, the link between Wilson and Wetherell. Wilson's relatives confirmed that Chambers and Wilson used to hunt together in Scotland,<sup>119</sup> and Witchell related that the two men leased a "wild-fowl shoot . . . close to Inverness."<sup>120</sup> (Egginton's widow likewise confirmed that Wilson "used to fish and shoot up in Scotland.")<sup>121</sup> Egginton's statement that Wilson said his "friend" (Chambers) had supplied the Surgeon's Photograph as a ready-made image independently confirms the first-person testimony from Ian Wetherell and Christian Spurling. And, as Egginton emphasized, "The story I have told you was that given to me by Lt. Col. Wilson and not second hand."<sup>122</sup>

There is also a great deal of tantalizing hearsay evidence regarding skepticism on the part of Wilson's friends and family. Researcher Maurice Bur-



**Figure 4.10** Less tightly cropped versions of the Surgeon's Photograph reveal the small size of the model of the monster used to perpetrate the hoax. (Reproduced by permission of Fortean Picture Library, Ruthin, Wales)

ton was told that “everyone” in a London club to which Wilson had belonged “knew the picture was a hoax.” Following up this lead, Burton wrote to a friend of Wilson, who “evaded my question but answered rather in the nod-is-as-good-as-a-wink manner.”<sup>123</sup> According to Wilson’s sister-in-law, Wilson’s younger son “was very skeptical over the whole Loch Ness question, and he told a cousin it was a hoax.”<sup>124</sup> A friend of Wilson’s surviving son related that “from all accounts R. K. was a great prankster with a wicked sense of humour. . . . R. K. didn’t discuss the photo with his family. . . . [T]he generally held opinion amongst the family is they are sure that it’s probably a fake.”<sup>125</sup> Finally, Egginton’s widow recalled that Wilson had told the hoax story for years. “Everybody knew,” she said, “we knew up there. We all laughed about it, we have done so for years. We knew the story, my husband did, I did too. I find it incredible that the hoax lasted so long.”<sup>126</sup>

The case for the photograph’s being a hoax is very strong, while that for its being real amounts, essentially, to the impression that the silhouette resem-

bles a monster. Yet, even this gut test fails badly. Looking at the scale of the ripples in the photo—especially in the recently publicized less tightly cropped version—the image seems obviously to depict something very small (figure 4.10). As early as 1960, commentators assessed the object as under 1 foot in height, based on the ripple size. Today, Martin and Boyd explain, “Avid believers in the authenticity of the photograph centre their faith around [Paul] LeBlond and [M. J.] Collins’ more recent size determination. . . . Using the wind waves visible in the uncropped photograph to deduce a scale for the object in the center, they concluded this to be about 1.2 m [4 feet] in height.”<sup>127</sup> Addressing this embarrassingly small upper-range estimate, Ronald Binns retorted, “Even if the object was 1.2 meters high, so what?”<sup>128</sup> That scale is obviously consistent with a small model, not with a dinosaur-size monster.

Despite all the evidence to the contrary, this vague, evocative image remains the most powerful icon for Nessie and continues to shape the public imagination. Such is its power. But serious students of the mystery have little choice but to face the historical truth: the Surgeon’s Photograph is a known fake.

#### The Lachlan Stuart Photograph

World War II suppressed interest in the Loch Ness monster, and sightings fell off correspondingly. But interest began to revive in the 1950s. Key to that cryptozoological renaissance was a new photograph, taken by a forester named Lachlan Stuart (figure 4.11). Among dedicated Nessie researchers, it became arguably as influential as the Surgeon’s Photograph. And, like that famous icon, Lachlan Stuart’s photo was a hoax.

According to Stuart, he got up early on July 14, 1951, to milk his cow. Spotting something strange out his window, he shouted for his wife and houseguest, and grabbed his camera. Running to the shore of the loch, they watched three humps and “a long thin neck and a head about the size and shape of a sheep’s head. The head and neck kept bobbing down into the water.” As the creature cruised—astonishingly, just 40 yards offshore—Stuart snapped his famous photo. He developed the film on his lunch break, and Nessie researcher Constance Whyte saw the negative and photo later the same day.<sup>129</sup>

I must stop here to say that this photograph bothered me from the first moment I saw it. Even as a monster-loving child, I felt that the weirdly angular humps did not look like as though they belonged to an animal. They also conflicted badly with the plesiosaur I understood Nessie to be. (Of course, humps-in-a-line sightings have always composed a significant subset of reports.) But



**Figure 4.11** The photograph taken by Lachlan Stuart in July 1951. (Reproduced by permission of Fortean Picture Library, Ruthin, Wales)

the photo was received as a major breakthrough in the 1950s, partly on the strength of Stuart's apparent sincerity. "I could not," Whyte raved, "put forward this photograph with more confidence if I had taken it myself."<sup>130</sup> This confidence was misplaced. As researcher Nicholas Witchell learned, "Lachlan Stuart's photograph, of three angular 'humps' a short distance offshore, was a hoax: Mr. Stuart's account of what happened, a fabrication. He evidently intended no great mischief, and was both surprised and amused that his picture—in reality of three partly submerged bales of hay covered in tarpaulin—should have been taken seriously." Shortly after admitting to having set up the hoax, Stuart took another Loch Ness local (author Richard Frere) to see the props. They were "hidden in a clump of bushes."<sup>131</sup>

The revelation that the photograph is a crude fake may not seem surprising. It looks like a crude fake. Yet Ronald Binns argues that hindsight obscures the photo's historical influence. Consider that in 1976, the scientific director of the Loch Ness Investigation Bureau characterized Lachlan Stuart's photo as "direct photographic evidence as to the probable shape of the central back



region of the animal.”<sup>132</sup> Looking back, Binns reflects, “What has probably been lost sight of over the years is the impact which the Wilson and Stuart photographs had on monster-hunters back in the 1960s and 1970s. In those days we all firmly believed that they were genuine photographs and that the monster was indeed a very big animal with a long giraffe-like neck, capable of transforming itself into a three-humped object.”<sup>133</sup>

#### The Tim Dinsdale Film

If asked to point to the Loch Ness mystery’s equivalent to the Roger Patterson–Bob Gimlin film, which allegedly caught a glimpse of Bigfoot, most people would select the famous Surgeon’s Photograph. Loch Ness researchers probably would give a different, deeper answer: the Tim Dinsdale film. This little piece of black-and-white movie footage, shot in 1960, shows a tantalizingly indistinct, far-off blob moving on the surface of the lake. Nessie researchers find it compelling and evocative. As Roy Mackal, scientific director of the Loch Ness Investigation Bureau, explained, when all other evidence seemed unconvincing, “the one thing that would not go away was the Dinsdale film sequence. Although it was grainy in quality because of the great distance involved in the photography, I could not explain it, try as I would. It alone was sufficient for me.”<sup>134</sup>

Dinsdale was an engineer who developed a sudden and powerful fascination for Nessie, after reading a magazine article late one night in 1959:

I kept turning the story over in my mind, and, late that night in bed, fitfully asleep, I dreamt I walked the steep jutting shores of the loch, and peered down at inky waters—searching for the monster; waiting for it to burst from the depths just as I had read, and as the wan light of dawn filtered through the curtains, I awoke and knew that the imaginary search beginning so clearly in my dream had grown into fact.<sup>135</sup>

Reviewing the literature on the monster, Dinsdale hatched a very simple plan: he would drive to Loch Ness and film Nessie. And that, he soon reported, is exactly what he did. Indeed, Dinsdale spotted the monster just minutes after his first view of the loch: “Intrigued, I drove up closer . . . and then, incredibly, two or three hundred yards from shore, I saw two sinuous grey humps breaking the surface with seven or eight feet of clear water between each! I looked again, blinking my eyes—but there it remained as large as life, lolling on the surface!”<sup>136</sup> Alas, this was a false alarm. Upon closer examination through

binoculars, the monster “turned out to be a floating tree-trunk after all.”<sup>137</sup> But the excitement of his vacation was just beginning. Four days later, after driving about, visiting authors and witnesses, and periodically stopping to observe the loch—bingo! The Loch Ness monster!

The light began to fail, and then, quite suddenly, looking down towards the mouth of the river Foyers, I thought I could see a violent disturbance—a churning of rough water, centering about what appeared to be two long black shadows, or shapes, rising and falling in the water! Without hesitation I focused the camera upon it and exposed twenty feet or so of film. . . . I went straight to bed quite sure of the fact that the Monster, or part of it at least, was nicely in the bag!<sup>138</sup>

Nor was Dinsdale’s luck, it seemed, exhausted. On the sixth day of his vacation, he filmed Nessie a second time! Coming over a hill,

I saw an object on the surface about two-thirds of the way across the loch. . . . I dropped my binoculars, and turned to the camera, and with deliberate and icy control, started to film; pressing the button, firing long steady bursts of film like a machine gunner. . . . I could see the Monster through the optical camera sight . . . as it swam away across the loch it changed course, leaving a glassy zigzag wake; and then it slowly began to submerge.<sup>139</sup>

Flush with the knowledge that he and his camera had “reached out across a thousand yards, and more, to grasp the Monster by the tail,”<sup>140</sup> Dinsdale returned home. When his motion-picture film was developed, however, he discovered with disappointment that his first sequence of “Nessie” footage was “no more than the wash and swirl of waves around a hidden shoal of rocks; caused by a sudden squall of wind. . . . I had in fact been fooled completely!”<sup>141</sup>

Two of his three “monster” sightings had proved to be simple misidentification errors. But what of the last? Viewing the remaining film sequence, Dinsdale was convinced that he had truly captured proof of the existence of the Loch Ness monster—and felt that science would soon agree. Unfortunately, even he had to concede that this “shabby little black and white image that traced its way across the screen” looked fairly unimpressive.<sup>142</sup> Shot at extremely long range, the film depicts an indistinct blob moving on the surface of the water a mile in the distance. Not surprisingly, it was greeted with indifference by the scientists whom Dinsdale approached. However, television audiences proved much more receptive. Dinsdale’s television debut was covered by major newspapers as far away as Chicago,<sup>143</sup> securing him a Nessie book deal (the first of several) and launching his new career as a Nessie

researcher, author, and lecturer.<sup>144</sup> Dinsdale became a monster celebrity. (He even appeared on *The Tonight Show* with Johnny Carson during a lecture tour of the United States in 1972—a six-week “whirlwind of appointments, interviews and rehearsals for TV, radio and the newspapers.”)<sup>145</sup>

But what exactly did Dinsdale film? Certainly, his footage depicts a moving object on the surface of the loch; beyond that, it’s difficult to say. This “fuzzy, distant, inconclusive” film, as the *Boston Globe* described it,<sup>146</sup> lends itself to various highly uncertain interpretations. For example, consider the conclusion of the Royal Air Force photographic experts from the Joint Air Reconnaissance Intelligence Centre (JARIC) who studied the film in 1966. Dinsdale felt that the investigators had “vindicated” his film,<sup>147</sup> but this is a significant overstatement. In fact, they found that the appearance and speed of the blob in the film are consistent with those of a motorboat (“a power boat hull with planing hull”). However, the report continued, if the blob were a motorboat, this “would scarcely be missed by an observer.” That is, because Dinsdale *said* that it was not a boat, “it probably is an animate object.”<sup>148</sup> The assumption that Dinsdale would have recognized a distant motorboat is extremely shaky. After all, Dinsdale mistook other inanimate objects (first a log, and then some rocks) for the Loch Ness monster two other times during the same week!

Essentially, the experts at JARIC found that Dinsdale’s blob is consistent with a monster—or with a boat. This conclusion is not terribly helpful. Since the film was analyzed, various authors, experts, and television productions have attempted to enhance the film, with results supporting (variously) either a monster or a boat. For example, pro-Nessie author Henry Bauer asked “a faculty member in the Computer Science Department at Virginia Tech . . . [to] scan a number of frames at higher resolution and to examine them under various types of enhancing techniques”; from this, he concluded that the film does not show a boat.<sup>149</sup> By contrast, Adrian Shine found frames of Dinsdale’s film that suggest a manned boat. When he asked members of the original JARIC team to have another look at the film in 2005, they found that the object “has the overall appearance of a small craft with a feature at the extreme rear, consistent with the position of a helmsman.”<sup>150</sup>

The Dinsdale film has quite a bit in common with the Patterson-Gimlin film. Both are influential among core proponents. Both filmmakers took a short trip with the intention of filming a famous cryptid, and then immediately did. And both films ultimately frustrate the search for answers. Could Dinsdale really have filmed a monster? The film’s mysterious blob cannot tell us—not for sure.

Nonetheless, there are circumstantial hints that suggest a more prosaic explanation. For example, Dinsdale's blob travels in plain sight of a motor vehicle on a road just 100 yards away. The vehicle's driver and the "monster" would have had clear views of each other, but neither slows or reacts to this close encounter. To critic Ronald Binns, "The fact that the driver just kept going suggests that this was because the object passing by was something perfectly ordinary—a motor boat."<sup>151</sup>

As well, there are some red flags about Dinsdale himself. Although he had a reputation among critics and friends alike as "a man of great sincerity,"<sup>152</sup> he sometimes let his imagination run away with him, as it did during the two false-positive Nessie sightings he made in the days immediately before he shot his famous film. Given those misidentification errors, it is hard to know how to interpret his spectacular claim of a later, close-up sighting in 1971:

I glanced to starboard and instantly recognized a shape I had seen so often in a photograph, the famous "Surgeon's Photograph" of 1934—but it was alive and muscular! Incredulous, I stood for a moment without moving. All I could do was stare. Then I saw the neck-like object whip back underwater, only to reappear briefly, then go down in a boil of white foam. There was a battery of five cameras within inches of my right hand, but I made no move towards them.<sup>153</sup>

Inexplicably, his later books reduce this close encounter to a sort of aside or footnote: "The strangest radio interview I had was in 1971 at Inverness: moments after seeing the Monster's head and neck from [a boat] I had switched on a tape recorder to make a commentary, and BBC radio wanted to use it for a science programme." After barely mentioning having seen the Loch Ness monster, Dinsdale spends the next two paragraphs on a pointless anecdote about the "peculiar experience" of technical glitches for an interview.<sup>154</sup> What gives?

Dinsdale was also given to flights of supernatural fancy. He was, for example, "conscious of some dark influence" at one secluded beach where he often staked out the monster:

Four of the five expeditions based there resulted in illness or injury, or accident of a most unpleasant nature, and I became aware of some strange influence which seemed to be malevolent. . . . I do subscribe to the belief that . . . purely psychic influence can have a physical effect on people, and sometimes on material objects. I have witnessed such phenomena, which absolutely defy the physical laws as we understand them.<sup>155</sup>

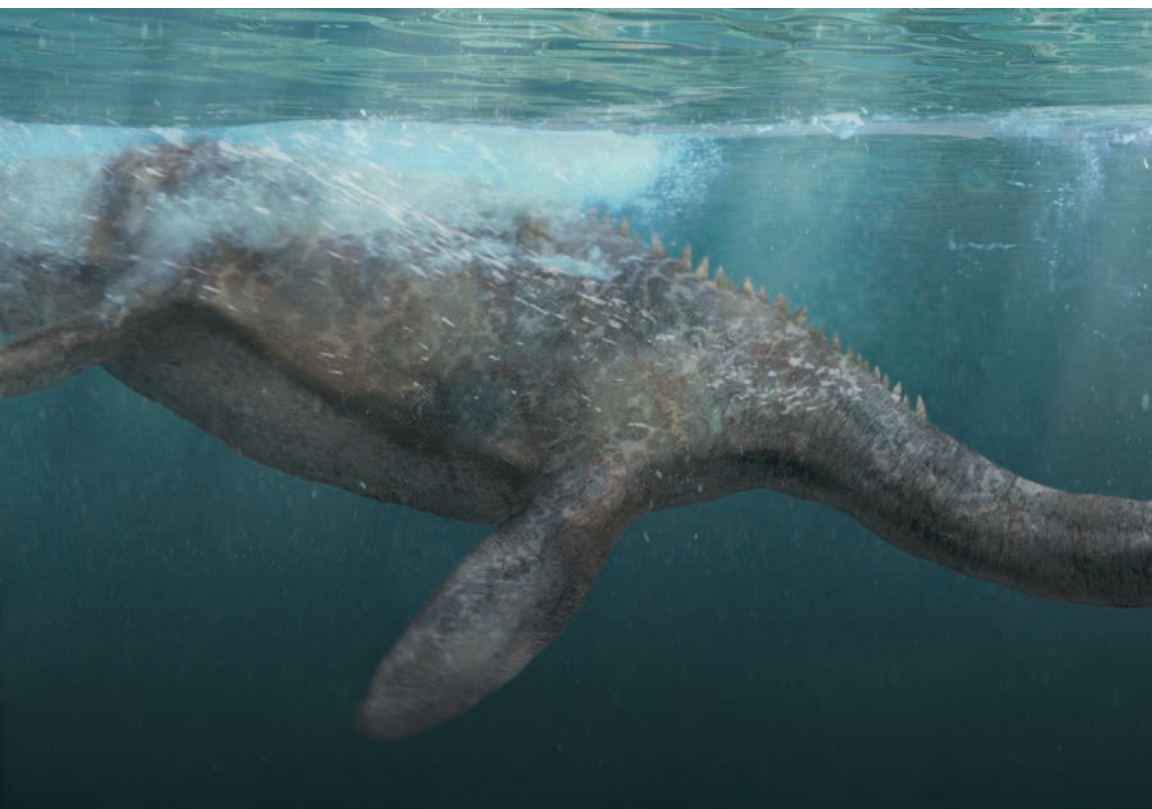
In the same vein, he told the *Washington Post* that he sometimes experienced “dread” while on his boat on the loch: “That’s the only word I have to describe it. Dread. I knew I wasn’t alone. I knew it.”<sup>156</sup>

Finally, there is the Dinsdale family’s puzzling approach to stewardship of the film. As longtime Nessie researcher Tony Harmsworth complains, Tim Dinsdale long refused to allow researchers with Adrian Shine’s reputable Loch Ness and Morar Project to study the film—a situation that did not improve after Dinsdale’s death. “Wendy Dinsdale still refuses to allow the film to be properly examined by the Loch Ness Project’s evidence analysts,” Harmsworth writes, “which is both sad and implies that there may be something to hide.”<sup>157</sup> While television productions are sometimes granted permission to show portions of the film, scholarship would be much better served if all researchers had ready access to high-quality copies. As it is, many Loch Ness researchers have never seen the complete film, which has been called “the single best piece of photographic evidence of Nessie”!<sup>158</sup>

#### A MIXED BAG

The Loch Ness monster is not a species—it is a social phenomenon in which, over many decades, a wide variety of witnesses have described a wide variety of things for a wide variety of reasons. It is not one overarching mystery waiting for one generic solution, but a collection of many unique cases. Among those many cases, some are certainly hoaxes. Others are certainly the result of mistaken identification of known phenomena for an unknown monster. The question is: Could some remainder or subset of “Nessie” cases describe genuinely unknown animals? It’s possible (if unlikely).

Most sources agree intellectually that the Nessie database is a mixed bag. However, the temptation to propose a kind of Grand Unified Nessie Theory has often proved irresistible to skeptics and proponents alike. This urge flies in the face of the highly variable descriptions that eyewitnesses have provided. As one article joked in 1934, “From the evidence, he must be a mixture of all that walks, flies, swims—and makes the hotels do miraculously.”<sup>159</sup> Decades later, Tim Dinsdale characterized Nessie witnesses as “consistently inconsistent” on the critical matter of basic body plan: “Everyone seemed to have noted a different number of ‘humps’ in the water—one, two, three and even more on occasions, and sometimes no humps at all, just a huge back like an upturned boat. It was difficult to understand.”<sup>160</sup>



**Figure 4.12** An elasmosaur-type plesiosaur. (Illustration by Daniel Loxton)

This difficulty evaporates once we accept that “Nessie” is a catchall term for whatever witnesses happen to find puzzling when they look out over the loch. But interesting questions remain: What are the various things in the mixed bag? And is it possible that a true monster could hide in that mix? Could there be a signal, or signals, hidden in all that noise?

#### The “Plesiosaur Hypothesis” Redux

We have seen that the “plesiosaur hypothesis” was based on three exceedingly wobbly pillars: George Spicer’s *King Kong*-inspired sighting, a report that Alex Campbell recanted as a mistake, and the fraudulent Surgeon’s Photograph. Given that unstable foundation, are plesiosaurs worth considering at all? Prominent cryptozoologist Loren Coleman suggests that they are not:



Most American cryptozoologists, from the beginning, and, indeed, most critical thinking cryptozoologists today reject The Plesiosaur Hypothesis. The mammalian focus and other schools of thought have won out long ago. We realize that these extinct marine reptiles are extinct, and to promote or use them as candidates for Loch Monsters is done mostly by “true believers” (on both sides of the aisle, whether they are pro- or anti-Nessites).<sup>161</sup>

In addition, plesiosaurs are a terrible explanation for reports of a multi-humped, sea serpent-type Nessie (figure 4.12). Still, many witnesses have described creatures that clearly do resemble plesiosaurs—pivotal early witnesses and recent witnesses as well. In 1997, for example, a journalist claimed (“apparently seriously,” according to Coleman)<sup>162</sup> that he had seen five plesiosaurs:



I was on the banks of Loch Ness the other morning, sunning my long legs, when one of those Nessies—those plesiosaur-type monsters that inhabit the loch—surfaced in front of me. She was 10 or 15 yards away. She had three or four humps and a greenish-brownish hide. Small, imperious head. Long, graceful neck. . . . Within a few seconds, a second monster surfaced, and bobbed beside the first one. Then a third and a fourth one—followed by a juvenile. . . . But my camera was in my car.<sup>163</sup>

In the context of a lighthearted travel story, this outrageous sighting seems like an obvious joke—especially given the writer's aside: "Perhaps it was just a brain storm; increasingly, I seem prone to them." Be that as it may, this man and other witnesses clearly describe "plesiosaur-type monsters." The ethos of cryptozoology (essentially, "take eyewitness testimony seriously") seems to demand that cryptozoologists accept this option. And while the "plesiosaur hypothesis" may have fallen on hard times (especially in the wake of the revelation that the Surgeon's Photograph was a hoax), there is no getting around its decades-long popularity—not only in the public imagination, but in the cryptozoological literature as well. As legendary cryptozoology pioneer Bernard Heuvelmans pointed out in 1977, "the plesiosaur has remained the candidate of choice for Anglo-Saxon researchers favorable to the creature's existence."<sup>164</sup> Writing in 2003, cryptozoologist Karl Shuker agreed that the hypothetical relict plesiosaur "remains the most popular identity among cryptozoologists for the Loch Ness monster."<sup>165</sup> Many Nessie books and Nessie researchers have gone to bat for this idea or at least included it as a distinct possibility. Tim Dinsdale advocated plesiosaurs as a more parsimonious explanation than any large undiscovered species. At least we know that plesiosaurs used to exist! Besides, he said, "the Monster looks exactly like a type of long-necked Plesiosaur. . . . If it is not a type of Plesiosaur, then I have no idea what it can be."<sup>166</sup>

Notwithstanding this long (and continuing) history of reports of plesiosaur-like creatures in Loch Ness, this idea was always spectacularly unlikely. Plesiosaurs have been extinct for 65 million years, while Loch Ness was a solid glacier just a few thousand years ago. Even if we were to imagine that plesiosaurs had survived undetected somewhere in the oceans, it is unlikely that they could have colonized Loch Ness. They were tropical animals, unsuited for the cold waters of the loch—and most plesiosaurs were marine animals, unsuited for freshwater in general. Plesiosaurs would also require more food than the loch can provide. Indeed, extensive biological sampling and sonar surveys conducted by Adrian Shine and other researchers of the Loch

Ness and Morar Project have revealed that the loch has a total fish population of only about 22 tons.<sup>167</sup> This is simply not enough food for a breeding population of plesiosaurs. As Shine explains,

Before hopes are raised too high . . . it should be borne in mind that predators upon this biomass should not amount to more than approximately a tenth of the gross weight. Thus we have available a total of approximately two tonnes [2.2 tons] of “Monster” . . . equivalent to scarcely half the weight of a 36-ft (13 m) Whale Shark *Rhincodon typus*. In fact, two tonnes divided into an absolute minimum viable population of, say, ten creatures, would give an individual weight of only 200 kg [440 pounds].<sup>168</sup>

Moreover, hypothetical plesiosaurs must not only eat, but also die. A population would leave bones on the loch floor. Dredging and submarine searches have not found bones or other physical remains. Finally, plesiosaurs were air breathers. Any plesiosaurs in Loch Ness could be photographed several times an hour, each time they surfaced to breathe. (Their air-filled lungs would also light up sonar like nobody’s business—which fails to happen in survey after survey.)

Thus the plesiosaur-type Nessie, based on popular culture and hoaxing, can be definitively ruled out on biological grounds. But, then, what are witnesses seeing out on the loch, if not Nessie?

#### Misidentification Errors

Skeptics argue that simple misidentification accounts for many reports of a monster in Loch Ness, and proponents often agree. As pro-Nessie author Henry Bauer forthrightly asserts, “At Loch Ness the opportunities to be deceived are legion.”<sup>169</sup> Under the right viewing conditions (such as the calm water and long distances typical in Nessie sightings), known objects or events can create illusions that seem compelling even to careful observers. Birds, splashing fish, otters, logs, boats and their wakes, and waves are especially common culprits. Reviewing the sighting records, Roy Mackal concluded that “careful examination of the reports tells us that a large proportion of these observations, perhaps 90%, can be identified as errors, mistakes, misinterpretations, and, in a few cases, conscious frauds.”<sup>170</sup>

Hearing this, monster fans sometimes feel incredulous. Can people really mistake, for example, common birds for plesiosaurs? Perhaps surprisingly, the answer is unequivocal: yes—and they often do.

There are many specific, documented cases in which witnesses mistook other objects or animals for the Loch Ness monster. Tim Dinsdale describes seeing Nessie “as large as life,” only to subsequently identify this faux-monster as a “floating tree-trunk after all.”<sup>171</sup> Similarly, cryptozoologist John Kirk relates a personal misidentification experience during his “pilgrimage to Loch Ness, a shrine for cryptozoological enthusiasts the world over.” Gazing hopefully over the loch, he “thought the monster had surfaced when a long slender neck popped up out of the water. . . . I can recall how, for a moment, the hair on the back of my neck stood up.” However, Kirk had binoculars ready, which allowed him to positively identify his monster: “a crested grebe, a common waterfowl frequently responsible for causing false alarms in the loch.”<sup>172</sup> Similarly, influential early Nessie witness Alex Campbell admitted that at least one of his sightings of a plesiosaur-like creature was really a sighting of cormorants. Mackal has referred to standing waves (caused when boat wakes reflecting from the sides of the loch intersect one another long after the boat is gone) as “the most ubiquitous of all Loch Ness mirages.” So common were false positives caused by standing waves that “quite early, the [Loch Ness Investigation] Bureau began keeping a record of any and all boats passing through the lake, so as more readily to discount sightings that were really reports of the standing waves.”<sup>173</sup>

As soon as the monster sightings began, people rushed to propose various living animals as the solution to the mystery: a crocodile,<sup>174</sup> a sturgeon,<sup>175</sup> an oarfish,<sup>176</sup> a beluga, a giant squid, a giant eel,<sup>177</sup> and so on. Some suggestions were rather fanciful. One wag joked that the monster could be a “somewhat rare” breed of camel remarkable “for the abnormal length of time it can remain under water while swimming.”<sup>178</sup> Others proposed, inexplicably, that the “Loch Ness monster is a sunfish, a native of Australia,”<sup>179</sup> or even that “a pair of sharks might account for the mystery, if there are sharks without the green dorsal fin, which would betray them?”<sup>180</sup> Indeed, there is an entire book dedicated to the thesis that Nessie is a super-gigantic version of *Tullimonstrum gregarium*—a soft-bodied, 1-foot-long marine invertebrate known only from 300-million-year-old fossil beds in Illinois.<sup>181</sup>

Other early suspicions clustered around more plausible suspects: Could witnesses have spotted otters, dolphins, porpoises, or (especially) seals in the loch?

Legendary skeptical investigator Joe Nickell favors otters as a general explanation for many monster sightings in lakes.<sup>182</sup> Otter habitat geographical-

ly correlates well with lake monster distribution (especially in North America), and otters certainly can resemble monsters. Alone or in pairs, their long sinuous necks and snake-like heads resemble those of plesiosaurs. In larger groups, the rolling dives of otters can create a powerful illusion of undulating coils.<sup>183</sup> With that in mind, it is notable that otters do live around Loch Ness.<sup>184</sup> Expectant attention operating as it does, we can infer that some Nessie reports must describe otters. Mackal was more direct, asserting that “a good number of monster sightings reported by tourists do result from the observations of otters.”<sup>185</sup> Furthermore, a case can be made that otters may lie behind specific sightings. Notably, one witness from the initial rush of 1933 reported a Nessie that “certainly looked like three or four otters together, going in a bunch.”<sup>186</sup> Similarly, according to one local at the time, George Spicer’s crucially important sighting could be explained as a misidentified otter.<sup>187</sup> (This is the explanation favored by many critics, including Ronald Binns and Nickell. In my opinion, the fingerprints of *King Kong* are unmistakable in Spicer’s account, but it is possible that he filtered an actual animal sighting through his impressions from the film. This may explain how his initially modest 6- to 8-foot creature grew into a 30-foot giant in subsequent tellings.)

Because Loch Ness is connected to the North Sea by a short hop up the River Ness, Scotland’s local porpoises and seals seemed like obvious suspects from the first—so obvious that Campbell took pains to deny the possibility in his news story about the original sighting by Aldie and John Mackay: “It should be mentioned that, so far as is known, neither seals or porpoises have ever been known to enter Loch Ness. Indeed, in the case of the latter, it would be utterly impossible for them to do so, and, as to the seals, it is a fact that though they have on rare occasions been seen in the River Ness, their presence in Loch Ness has never once been definitely established.”<sup>188</sup> However, both types of local animal were more plausible than Campbell’s article claimed. To begin with, they were consistent with many reports. Indeed, according to one of the earliest (in June 1933), “the creature seemed rather like a porpoise or seal.”<sup>189</sup> As a matter of practicality, medium-size sea animals can swim up the river and into the loch during high water; and, as Campbell conceded, seals were sometimes seen in the River Ness. From day one, these facts made seals the leading skeptical hypothesis. Although he personally rejected this explanation, Rupert Gould acknowledged that seals were “the most plausible theory of all—one which, at present, holds the field. That is,

that the ‘Loch Ness monster’ belongs to the Pinnepedia—and is, in all likelihood, a large grey seal.”<sup>190</sup>

For our purposes, looking back over the Loch Ness mystery, the key fact is this: it is now known, definitively, that seals do enter the loch. Furthermore, there is documentary evidence that porpoises or dolphins also venture into Loch Ness. Campbell’s claim that “it would be utterly impossible” for porpoises to enter the loch is flatly refuted by an article published in the *Daily Mail* two decades before the Mackays’ sighting: “A rare phenomenon is now to be observed in Loch Ness, where a school of porpoises have got enclosed. They entered from the Moray Firth when the River Ness was in high flood, and now that the river is almost unprecedentedly low, even a baby porpoise would find it hard to pass the shallow stretches, while the adults would be hopelessly stranded.”<sup>191</sup>

Even more to the point, seals are a documented fact of life in Loch Ness (as they are in many Scottish lochs with access to the North and Irish Seas and the Atlantic Ocean). All debate on the presence of seals in Loch Ness was settled in 1985, when a harbor seal made the loch its home for seven months (figure 4.13). During this time, “about 30 people reported about separate sightings of the seal,” and clear photographs were taken by Gordon William-



**Figure 4.13**

Harbor seals thrive throughout the Northern Hemisphere, found everywhere from the coast of the North Sea in Scotland to the coast of the Pacific Ocean in Canada. (Photograph by Daniel Loxton)

son.<sup>192</sup> In 1999, Nessie researcher Dick Raynor captured new video footage of seals in Loch Ness.<sup>193</sup> In decades of investigation, Raynor writes (he has been involved since 1967), “*none of us* have turned up one iota of scientifically valid evidence for any biological ‘monster.’ The most significant development is the realization that seals frequently enter the loch, and probably account for many of the sighting events.” (It is not necessary to dwell on the eyewitness testimony of seals that Williamson collected from water bailiffs and fishermen, but those reports did offer support for the idea that seals are frequent visitors to the loch. Locals claimed many seal sightings and said that salmon fishermen had shot several seals over the years.)<sup>194</sup>

The presence of seals in the loch had been well attested all along. Consider, for example, the monster captured on film in 1934 by members of a team organized by a businessman, Sir Edward Mountain. When screened for “many leading scientists of the day in zoology and natural history . . . it was the general opinion of the scientists present that from the movements and manner of swimming the creature depicted was in all probability a member of the seal family, possibly a grey seal.”<sup>195</sup> The seal hypothesis was also apparently supported by key monster hunters, including Malcolm Irvine, who shot film footage of the alleged monster in late 1933 and again in 1936. Regarding the latter film, the *Scotsman* reported that Irvine believed that the creature was a seal.<sup>196</sup>

Finally, several witnesses during the initial rush of Nessie sightings in 1933 and 1934 either described a monster in seal-like terms or flat-out asserted that they had seen a seal. For example, one “Highland Minister, who for various reasons cannot allow his name to be published,” reported a creature with a head “not unlike that of a seal or sea lion.”<sup>197</sup> Mrs. Cranston of Foyers was more explicit. She told the *Daily Mail* that she had seen a salmon leap out of the water 200 yards away (practically point-blank range by Nessie sighting standards), followed immediately by a large round head that bobbed vertically in the manner of a seal. Cranston asserted that she was, sensibly, “convinced that it was a large seal chasing salmon in the loch.” At the Natural History Museum in London, Cranston’s explanation seemed obvious. As one curator explained, “We have thought that to be the probable explanation from the beginning. Grey seals have been known in the past in Loch Ness. They follow the salmon up the river.”<sup>198</sup> Interestingly, Marmaduke Wetherell (of hippo-foot infamy) reported that he personally had seen a seal in the loch: “I have not the slightest doubt that what I saw was a very big seal. The head leaves no room for doubt on that point. What appeared to be a hump was ac-

tually the creature's back as it lunged forward to dive. I am now quite satisfied that there is not a prehistoric animal in Loch Ness, but a very big seal."<sup>199</sup> Based on the testimony of these witnesses, the *Daily Mail* concluded its investigation of the Loch Ness monster with the screaming headline "There Is a Seal in Loch Ness." While Wetherell is obviously not a trustworthy source, this headline—at least in general terms, and at least some of the time—is completely correct.

#### Memory Distortion

Reports of mistaken or ambiguous sightings can also become embellished over time, as a result of distortion of the witnesses' memories, creative enhancement, retelling by the media, or any combination. It is easy to understand how this happens. Consider cryptozoologist John Kirk's false-positive sighting of Nessie, which turned out to be a Great Crested Grebe. If he had not had binoculars to penetrate the illusion on the spot, how might the "hair on the back of [his] neck stood up" emotional charge have influenced his later memories of the sighting?

Nor is this problem hypothetical. Important Nessie witnesses have embellished their tales over time. For example, the witnesses in the early "three young anglers" story specified in 1930 that they "could see a wriggling motion, but that was all, the wash hiding it from view." By 1933, the story had already evolved to describe "a dark back, appearing as two or three shallow humps."<sup>200</sup> By 1974, the original hidden-from-view story had been so elaborated that "the length of the part of it we saw would be about twenty feet, and it was standing three feet or so out of the water."<sup>201</sup>

Such distortion is not unique to cryptid cases and certainly is not due to any unique flaw in those who claim to have seen monsters.<sup>202</sup> Psychologists emphasize that the plasticity of memory is a defining factor of all firsthand testimony. Saints, scoundrels, geniuses, and idiots all face the same reality: the normal operation of human memory involves both creative reconstruction and loss of accuracy over time.

#### THE ASTONISHING HISTORY OF ORGANIZED SEARCHES

The sheer longevity of the Nessie legend makes it difficult to appreciate the number and scale of the decades of serious, sustained efforts to penetrate



the mystery. From gyrocopters to giant Nessie traps, almost any imaginable scheme has been tried—long ago and many times. The history of the hunt is too extensive to cover here in depth, but let's have a look at a few of the projects you might have thought of yourself.

- *Why not seek evidence in old books and newspapers?* Archival-sleuthing efforts hit the ground running in 1933 and have never stopped. Yet even today, with centuries' worth of national and regional newspapers scanned into searchable databases, the archival evidence remains the same: Nessie was born in 1933, in the wake of *King Kong*. There is no sign of a local cryptid tradition before that time (and certainly no record of a long-necked monster in the loch before George Spicer claimed to have seen it). Worse, what records there are suggest that such a tradition did not exist. When reporting that a group of Loch Ness locals mistook swimming ponies for kelpies in 1852, the *Inverness Courier* gave no hint of an existing Nessie legend beyond the generic international water-horse mythology. Four years later, the same newspaper covered claims of a 40-foot eel in a loch on the Isle of Lewis without ever hinting that Loch Ness might host a monster of its own.<sup>203</sup>

- *Why not hire an army of paid observers and station them around the loch with cameras?* This approach was tried in the summer of 1934, when Sir Edward Mountain paid twenty men to keep vigil around Loch Ness for a month. Working from dawn to dusk with “almost military precision, with a careful distribution of watchers at places most likely to yield satisfactory photographs,” the men dutifully generated twenty-one photographs of the alleged monster.<sup>204</sup> Roy Mackal asserts that they were false positive photos of waves and boat wakes (with one possible exception, showing an ambiguous hump), and this seems to be the consensus view: Mountain's observation campaign was a bust. As Ronald Binns explains,

Unfortunately there was a flaw in Mountain's great idea. His watchers were all unemployed men, drawn from Inverness labour exchange. In the hungry thirties to be paid 2£ a week just to sit at the side of Loch Ness on a summer's day must have been an attractive proposition. To be offered a bonus of ten guineas each time anyone photographed Nessie must have provided a great incentive to pander to the noble baronet's whimsy that there was a monster in the loch.<sup>205</sup>



**Figure 4.14** A battery of cameras overlooks Loch Ness in 1966. (Reproduced by permission of Fortean Picture Library, Ruthin, Wales)

Still, the strategy of an “army of observers” seems like an obvious one. For that reason, it has been tried many times since, using teams of volunteers—not to mention the informal coverage by thousands of camera-armed tourists!

- *Why not keep watch with super-high-powered telescopic movie cameras?* This scheme was tried, too, with person-years of observation from custom-built stationary platforms (figure 4.14) and mobile truck-mounted film rigs. For example, starting in 1964 the Loch Ness Phenomena Investigation Bureau kept a significant percentage of the loch under observation by using giant

camera rigs, which, as F. W. Holiday recalled, “were almost certainly the most formidable photographic tools that had ever been used for natural history purposes in Britain.”<sup>206</sup> With several months of continuous watches, the searchers expected success that very year. As Holiday explained, “It was not unreasonable to suppose that dawn to dusk watching, seven days a week for five months, would produce results. After all, if you watch a given area of sky for long enough, you are bound to see a rainbow.”<sup>207</sup> And, indeed, this strategy should have worked, if eyewitnesses were really seeing a monster. As Mackal reflected, “The number of recorded reports during the 30-year period following 1933 was roughly 3,000. This figure, taken at face value, would mean that about 100 observations were made annually. From this it is clear why it was reasonable to expect photographic surveillance of the loch surface to produce evidence rapidly.”<sup>208</sup> But it was not to be—not that year, or any year thereafter. In 1972, the camera batteries were finally dismantled. The failure of this heroic effort of sustained photographic observation indicates that most eyewitness reports must be wrong—with grim implications for a legend based on eyewitness sightings.

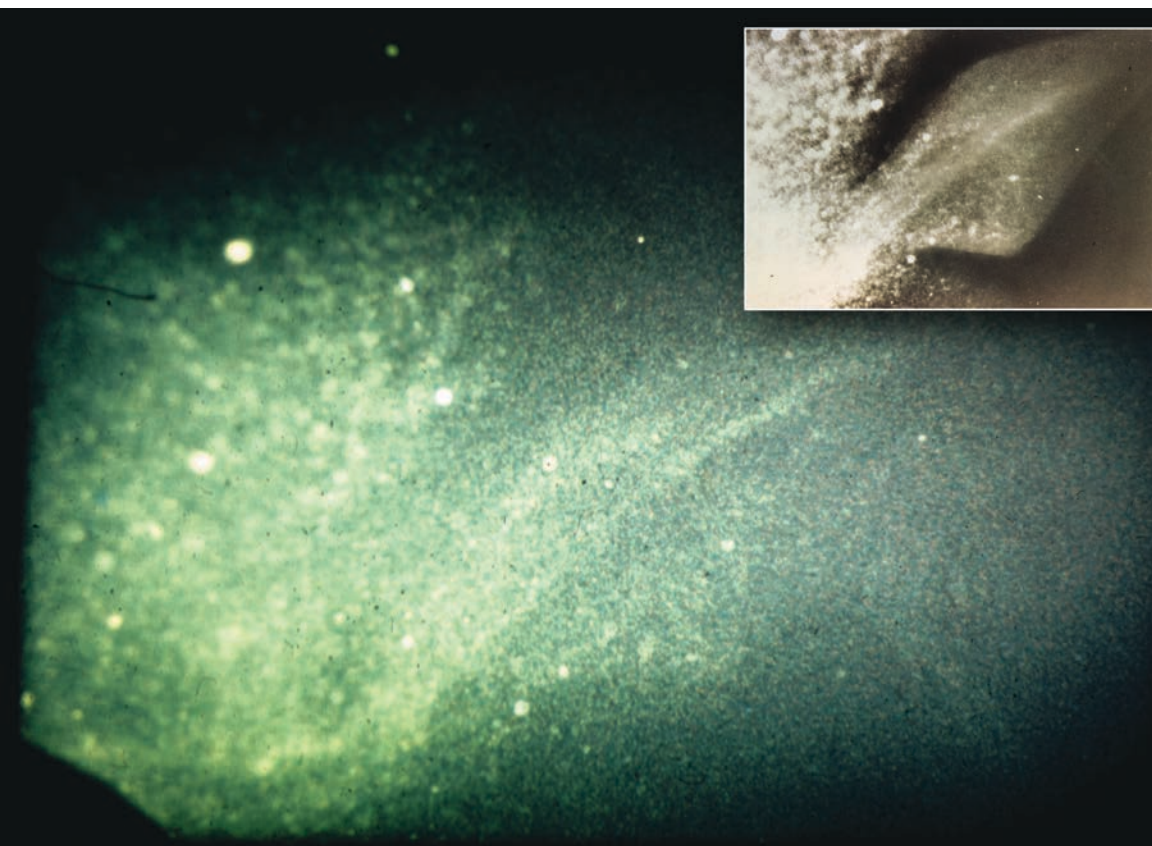
- *Why not search the loch using submarines?* This approach seems obvious, if expensive. It was, of course, tried. In 1969, for example, the Loch Ness Phenomena Investigation Bureau fielded a custom-built submersible called *Viperfish*, armed with biopsy harpoons (figure 4.15). Sponsored by *The World Book Encyclopedia*, the mission was a failure.<sup>209</sup> Other subs were deployed at Loch Ness in 1973 and (as a commercial-tourism concern) throughout 1994 and 1995.<sup>210</sup> The critical obstacle for this search strategy is that the water of Loch Ness is very opaque (typically described as “inky” or “murky”), and thus visibility under the water is limited to only a few feet.
- *Why not search the loch using underwater cameras?* The opacity of the water of Loch Ness likewise severely limits the usefulness of underwater photography. Despite this hindrance, a team led by lawyer Robert Rines claimed to have taken underwater photographs of a plesiosaur-like creature in 1972 and again in 1975. The first set of shots, purported to show a dramatic diamond-shaped flipper, was apparently taken with the assistance of a dowser—a local psychic who “detected” the monster using paranormal means and directed the camera placement.<sup>211</sup> (She also claimed at least fifteen



**Figure 4.15** Dan Taylor in *Viperfish*, his yellow submarine, at Loch Ness in 1969. (Reproduced by permission of Fortean Picture Library, Ruthin, Wales)

personal sightings of Nessie.)<sup>212</sup> The resulting photos were extremely indistinct, but were altered by an artist to depict an unmistakable flipper (figure 4.16). Exactly how that modification was done is controversial to this day. After computer enhancement, the photos remained ambiguous—only to later achieve shocking clarity through some additional undocumented process of creative compositing or retouching.<sup>213</sup> According to Nessie author Tony Harmsworth, “paint brush marks” are clearly visible on large blow-ups of the revised versions. “That is how it became so clearly a flipper,” Harmsworth explains. “The retouching is not sophisticated air brushing or modern Photoshop effects, but relatively crude paint brush effects.” Confronted with this evidence at a “tense meeting” with Adrian Shine, Rines himself admitted that there may have been retouching by a magazine editor.<sup>214</sup> In any event, these photographs were followed in 1975 by a shot alleged to show a plesiosaur-like body and neck and another said to show the monster’s head. Unfortunately, as pro-Nessie author Nicholas Witchell explained, “the camera and strobe light were photographing through the heavy gloom of the water, strongly stained with the peat brought down into the loch by the mountain streams. It was like a green fog in which the individual particles of this liquid suspension were almost large enough to see.”<sup>215</sup> Critics argue that the images in Rines’s photos





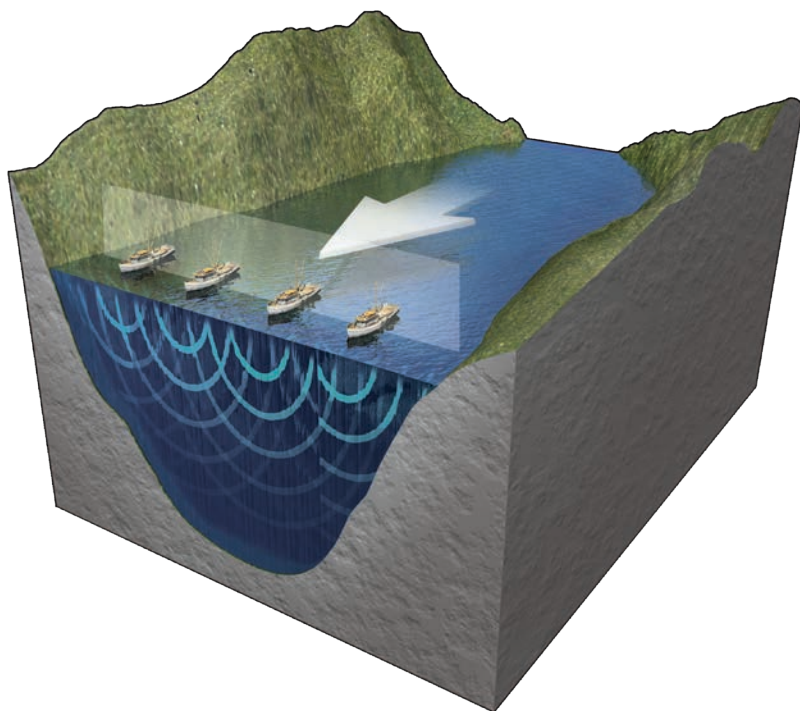
**Figure 4.16** The unenhanced original version of the first photograph of the purported flipper of a plesiosaur-like monster, taken by Robert Rines, compared with the retouched version (*inset*). A scan of the unenhanced version made from a 35mm Kodachrome transparency was provided by Rines to Loch Ness investigator Dick Raynor around 1972 (stated to be copied from “camera original” 16mm Kodachrome 11, with an ASA speed rating of 25). (Reproduced by permission of Mirror Syndication International; photograph courtesy of Dick Raynor)

from 1975 are consistent with those of silt or wood debris. (The “head” photo turned out to be an underwater stump that has been identified and recovered.)<sup>216</sup> Thus, as Witchell wrote, “it would be foolish to cling to the photos in the face of such uncertainties. Bob Rines, I think, now agrees.”<sup>217</sup> (I might add that the double-jackpot coincidence here would also stretch credibility. Rines’s underwater cameras watched just a handful of the loch’s 261 billion cubic feet—and for very short periods.)

- *Why not dredge the loch for bones?* In 1934, Rupert Gould pointed out that a population of giant animals should leave clear signs of its presence. Consider, for example, the “rather startling consequences” if the loch were home to a breeding colony of plesiosaurs: “What, on this assumption, has become of the bones which should, by now, have carpeted the entire floor of the Loch?” Could that biological treasure be just sitting there for the taking? Unfortunately, no. Gould noted that “no trawl-net—and many have been put down for biological purposes—has ever brought up any fragment of the kind.”<sup>218</sup> Yet this was, on the face of it, a promising strategy. As Binns pointed out, “The bed of Loch Ness is, in most places, as flat as a billiard table. If the loch contains an unknown species of giant animal with a bone-structure then evidence of skeletal remains ought not to be hard to find.”<sup>219</sup>

In fact, Loch Ness has been sampled extensively using dredges, scoops, and core samplers, including serious scientific efforts undertaken from the 1970s through the 1990s.<sup>220</sup> (In 2003, for that matter, a diver named Lloyd Scott *walked* the entire length of the floor of Loch Ness in a charity fund-raising stunt.) No monster bones were discovered, although a great deal was learned about the life of the loch, from fish to plankton to an invasive species of American flatworm thought to have been introduced on monster-hunting equipment!<sup>221</sup> The researchers with the Loch Ness and Morar Project also discovered that the deep, even, and undisturbed sediment on the floor of Loch Ness is a delicately stratified geologic record of the region. Thus any future dredging efforts will have to be weighed against the damage that dredges cause to this historical resource.

- *Why not search the loch using sonar?* This question, of course, is the doozy. It won't surprise you to learn that sonar has been tried, but few realize how intensively and how often Loch Ness has been scanned. In addition to attempts using a single boat, a submarine, or pier-based equipment, there have been many systematic grid- or dragnet-style sonar surveys of the entire loch (figure 4.17). In 1962, for example, a Cambridge University team used a four-boat fleet to sweep the entire loch. According to the team leader, “Nothing was detected by any of the boats. This seems to rule out the possibility that a large animal exists in the body of Loch Ness.”<sup>222</sup> Exhaustive sonar trawling in 1968, 1969, and 1970 (by a team from the University of Birmingham) produced disappointing results. (The survey of 1968 recorded two unusual contacts, but the work of the following year produced



**Figure 4.17** Several systematic, dragnet-style sonar surveys of the entire loch were conducted over twenty-five years. (Illustration by Daniel Loxton; not to scale)

nothing. The intensive survey of 1970 again, as Binns put it, “drew a complete blank.”<sup>223</sup> In 1981, the Loch Ness and Morar Project launched a custom-built sonar boat that scanned the loch from end to end, twenty-four hours a day. (In 1982, this effort racked up 1,500 hours of patrol time. While interesting sonar contacts were made, none indicated anything like the giant Nessie of eyewitness reports.)<sup>224</sup> Similarly, in 2003, the BBC sponsored a sonar search that used the Global Positioning System (GPS) to ensure complete coverage of the loch. “We went from shoreline to shoreline, top to bottom on this one, we have covered everything in this loch and we saw no signs of any large living animal in the loch,” according to one of the BBC’s sonar specialists.<sup>225</sup>

The granddaddy of all Loch Ness sonar searches was Operation Deepscan, conducted in 1987 under the command of Shine (figure 4.18). This coordinated, large-scale project mobilized twenty-four boats to sweep the





**Figure 4.18** The fleet of boats participating in Operation Deepscan in 1987. (Reproduced by permission of Fortean Picture Library, Ruthin, Wales)

loch from end to end—multiple times. The fleet created a “sonar curtain” across the loch, with follow-up boats ready to investigate anything detected by the curtain. The results? “Sonar Search for ‘Nessie’ Reveals 3 Wobbly Scratches,” ran the *Washington Post* headline.<sup>226</sup>

Results from the long history of sonar surveys of Loch Ness are mixed.<sup>227</sup> On the one hand, the sonar searches, conducted over forty years, are most notable for their complete collective failure to find giant monsters. Operation Deepscan and other surveys effectively rule out any possibility of Loch Ness plesiosaurs, giant newts, or 80-foot sea serpents. If they were living in the loch, sonar would have found them decades ago. On the other hand, some sonar contacts remain tantalizingly unexplained (including one of Operation Deepscan’s “wobbly scratches”). These hits are much smaller than the gigantic creatures reported by Nessie witnesses, but some could suggest animals larger than salmon. Could these anomalous contacts represent a genuine zoological surprise? It’s possible. Shine has argued hopefully for the possibility of sturgeon in Loch Ness.

There are, however, many sources of false-positive sonar contacts. Sonar can refract and reflect off thermal boundaries in the water column. It can reflect off the walls of the loch. Sonar can record schools of fish as

larger animals. Even boat wakes can create bogus sonar hits. Most important, sonar can record objects that are not animals. Logs are an obvious culprit, as is debris tethered to the loch bottom (such as from fishing gear). Amusingly, it is even possible that some sonar contacts record sunken equipment left behind over the decades by Loch Ness monster hunters!

#### UNDERWATER TUNNELS TO THE SEA?

The intensive searching has revealed none of the evidence we should expect if Loch Ness were home to one or more large monsters. This implies that eyewitness reports of such creatures must break down to a collection of hoaxes and (more commonly) errors of various types.

But what if Nessie only visits the loch? A part-time monster could explain the absence of sonar evidence. The Loch Ness and Morar Project concluded its review of the sonar evidence: “In the case of a single occasional migrant, detection would be virtually impossible.”<sup>228</sup>

The rivers and canals that flow into Loch Ness can be confidently ruled out as commuter routes for large monsters, being shallow, well travelled, obstructed by weirs, broken up by shipping locks, or some combination. Indeed, the best route from Loch Ness to the North Sea—the River Ness—is so shallow that fishermen often wade across it.<sup>229</sup> (The river also runs smack dab through the city of Inverness.) But could there be an additional, secret route?

Many people believe (as I did, as a child) that Loch Ness is connected to the North Sea through underwater tunnels. This is an amazingly persistent myth, perhaps because it is so convenient. How else could a gigantic monster hide in a confined space, other than by slipping out through a back door? However, this explanation has been known to be silly since the very origin of the Loch Ness monster legend. Speaking to reporters in late 1933, Rupert Gould ruled out the rumors of “a subterranean passage connecting Loch Ness to the sea” on the sensible basis that “the surface of Loch Ness is above sea level, and obviously could not be if there were a passage by which it would be drained down to sea level.”<sup>230</sup> Indeed, the surface of the loch stands more than 50 feet above sea level, and pressure of 50 vertical feet of water would propel a monster down a tunnel like a bullet.

It is worth noting that rumors of underwater tunnels to other lakes or to the sea are not unique to Loch Ness. Indeed, folklorist Michel Meurger has emphasized that hidden passageways are extremely common components of

the legends surrounding monster-haunted lakes around the globe.<sup>231</sup> While cryptozoologists take pains to distance themselves from the supernatural origins of lake monster traditions (such as the shape-shifting demonic kelpies), Meurger argues that the myths of secret outlets to the sea are merely a revision of the idea that monster lakes conceal passages to hell or the underworld.

### THE BOTTOM LINE

More than thirty years ago, Roy Mackal wrote that even unfalsifiable monsters must eventually fade away: “At least in theory no amount of failure could disprove our basic assumption. However, in practice, human nature being what it is, continued and total failure would be equivalent to disproof.”<sup>232</sup> Has that day come at last?

For eighty years, serious researchers have thrown money, reputations, and long years of labor into the depths of Loch Ness—with no sign of a monster to show for it. This outcome was inevitable. For all the science and technology brought to bear, Nessie was born from magic: the kelpie folklore of Scotland and the movie magic of Hollywood. Today, the creature has been forced into a paradox as magical as its roots: a giant monster that many people see, but that cannot ever be detected by science.

As Adrian Shine and David Martin explained in 1987, “Work in the 1980s is not a quest for the dragon of popular expectation. The media-christened ‘Monster,’ by definition imaginary and by connotation prehistoric, has an existence in the realms of entertainment copy, quite independent of research findings.”<sup>233</sup> After decades of fruitless searching, researchers had shifted from hunting the Loch Ness monster to studying the environment of the loch for its own sake.

And what of Nessie, that companion of my own childhood dreams? She swims on, swift and elusive, in the imagination of millions.

- 1 As Ronald Binns explains, “In fact there had been a road along the north shore of Loch Ness since the end of the eighteenth-century. Tourists and motor vehicles had been passing along it well before 1933. . . . All that happened in 1933 was that sections of the north shore road were improved. The road was resurfaced along its entire length and there were a number of repairs carried out” (*The Loch Ness Mystery Solved* [London: Open Books, 1983]), 63.
- 2 Tony Shiels, *Monstrum! A Wizard’s Tale* (London: Fortean Times, 1990), 69.
- 3 “The Quaternary (the last two million years),” Scottish Geology, [http://www.scottishgeology.com/geology/geological\\_time\\_scale/timeline/quaternary.htm](http://www.scottishgeology.com/geology/geological_time_scale/timeline/quaternary.htm) (accessed June 29, 2010).
- 4 More specifically, both the River Ness and the Caledonian Canal open into the innermost section of Moray Firth, called Beauly Firth. For its part, the length of the River Ness varies, depending on what is counted. Loch Ness empties first into a man-made body of water called Loch Dochfour (created when the water level of Loch Ness was raised during the construction of the Caledonian Canal). In total, the river route from Loch Ness proper to the mouth of the River Ness at Beauly Firth is a little over 8 miles. Sources that estimate the length of the River Ness at 6 or 7 miles are excluding the length of Loch Dochfour.
- 5 Binns, *Loch Ness Mystery Solved*, 72.
- 6 Quoted in *ibid.*, 63–65.
- 7 “The Sea Serpent in the Highlands,” *Times* (London), March 6, 1856, 12, reprinted from the *Inverness Courier*.
- 8 Lewis Spence, “Mythical Beasts in Scottish Folklore,” *Scotsman* (Edinburgh), March 4, 1933, 15.
- 9 Carol Rose, *Giants, Monsters, and Dragons: An Encyclopedia of Folklore, Legend, and Myth* (New York: Norton, 2000), 109, 205, 388.
- 10 Thomas Hannan, “Each Usage: The Water Horse,” *Scotsman*, October 25, 1933, 10.
- 11 Spence, “Mythical Beasts in Scottish Folklore,” 15.
- 12 Hannan, “Each Usage,” 10.
- 13 John Graham Dalyell, *The Darker Superstitions of Scotland, Illustrated from History and Practice* (Edinburgh: Waugh and Innes, 1834), 543–544, 682.
- 14 W. M. Parker and S. M. Young, letters to the editor, *Scotsman*, October 24, 1933, 17.
- 15 John Noble Wilford, “Legends of the Lochs: Quests by Saints and Science,” *New York Times*, June 5, 1976, 8.
- 16 Michel Meurger, with Claude Gagnon, *Lake Monster Traditions: A Cross-Cultural Analysis* (London: Fortean Times, 1988), 122–123, 126.

- 17 Ibid., 122.
- 18 Quoted in *ibid.*, 212.
- 19 “Sea Serpent Hoax of 1904 Is Bared,” *New York Times*, April 25, 1934, 17.
- 20 *Inverness Courier*, October 8, 1868. Incidentally, this is an early use of the word “monster” in relation to Loch Ness, contradicting the common claim that Alex Campbell coined the term for Nessie in 1933. Campbell’s use of the word was, however, instrumental in the creation of the modern legend of a Loch Ness “monster.”
- 21 Adrian Shine, *Loch Ness* (Drumnadrochit: Loch Ness Project, 2006), 7.
- 22 Reuters, “Travel Bargain Hoax—and So Is ‘Monster,’” *Los Angeles Times*, April 2, 1972, 2; “Operation Cleansweep 2001,” Loch Ness and Morar Project, [http://www.lochnessproject.org/loch\\_ness\\_sundberg.htm](http://www.lochnessproject.org/loch_ness_sundberg.htm) (accessed July 5, 2010).
- 23 “A Scene at Lochend,” *Inverness Courier*, July 1, 1852.
- 24 The newspaper quotes him as having said, “Dia mu’n cuairt duian, ‘a iad na h-eich-uisg’ tk’enn!” Catriona Parsons was kind enough to tackle a translation for this book: “I’m pretty confident this inscription is a garbled version of the Gaelic phrase ‘Dia mu’n cuairt dhuinn, ‘s iad na h-eich uisg’ a’ tighinn!’” she concluded. Literally, “(Let) God be around us, and the water-horses [kelpies] coming!” My thanks to the Gaelic Council of Nova Scotia.
- 25 The three men were Ian Milne, R. C. M. Macdougall, and G. D. Gallon, all of whom were Inverness locals. See Rupert T. Gould, *The Loch Ness Monster* (1934; repr., Secaucus, N.J.: Citadel Press, 1976), 36.
- 26 Quoted in “What Was It? A Strange Experience on Loch Ness,” *Northern Chronicle* (Inverness), August 27, 1930.
- 27 The keeper’s story, itself a contender for “first recorded Nessie sighting,” is an important case about which little seems to be known. Is this anonymous “keeper” the same person as William Miller, who is discussed in Gould, *Loch Ness Monster*, 35? Miller is identified as a “keeper,” and his alleged sighting in 1923 matches the description and timescale of that of the keeper mentioned seven years later in “What Was It?”
- 28 Piscator, letter to the editor, *Inverness Courier*, August 29, 1930.
- 29 “Lake Mystery in Scotland,” *Kokomo (Ind.) Tribune*, October 8, 1933, 12.
- 30 Most books identify her as “Mrs. Mackay” or even “Mrs. John Mackay,” although she was the primary witness. I take her first name from Tony Harmsworth, who interviewed her in 1986, *Loch Ness, Nessie and Me: The Truth Revealed* (Drumnadrochit: Harmsworth, 2010), 91–93.
- 31 Today, this building is home to the Loch Ness Exhibition Center and its associated research effort (Loch Ness and Morar Project).
- 32 Alex Campbell, “Strange Spectacle on Loch Ness: What Was It?” *Inverness Courier*, May 2, 1933.
- 33 Gould, *Loch Ness Monster*, 39–40.
- 34 “Loch Ness ‘Monster’: Ship Captain’s Views on Occurrence,” *Inverness Courier*, May 12, 1933.
- 35 Dick Raynor, “A Brief Overview of ‘Nessie’ History,” Loch Ness Investigation, <http://www.lochnessinvestigation.org/history.html> (accessed June 25, 2010).

- 36 Binns, *Loch Ness Mystery Solved*, 208.
- 37 There is some uncertainty about this date. Most sources date the Mackays' sighting to April 14, 1933 (which was the date provided by Gould in 1934). However, Campbell's original news item dates the sighting to "Friday of last week," which would be April 28, 1933. Compare Gould, *Loch Ness Monster*, 39, with Campbell "Strange Spectacle on Loch Ness."
- 38 Dennis Dunn, "King Kong Caps the Lot," *Daily Express* (London), April 19, 1933, 3.
- 39 "King Kong and the Schoolboy," *Scotsman*, May 9, 1933, 6.
- 40 George Spicer, letter to the editor, *Inverness Courier*, August 4, 1933.
- 41 Tim Dinsdale, *The Loch Ness Monster* (London: Routledge and Kegan Paul, 1961), 41.
- 42 Shine, *Loch Ness*, 9.
- 43 Quoted in F. W. Holiday, *The Great Orm of Loch Ness: A Practical Inquiry into the Nature and Habits of Water-Monsters* (New York: Norton, 1969), 30–31.
- 44 Quoted in Gould, *Loch Ness Monster*, 44.
- 45 Quoted in Holiday, *Great Orm of Loch Ness*, 31. Note, however, that Spicer's initial letter to the *Inverness Courier* estimated the creature's length as "six to eight feet long." He swiftly revised this measure upward to what became the canonical description of 25 or 30 feet long. In 1934, Spicer told Gould, "After having ascertained the width of the road, and giving the matter mature thought in every way, I afterwards came to the conclusion that the creature I saw must have been at least 25 feet in length" (quoted in Gould, *Loch Ness Monster*, 46).
- 46 Quoted in Holiday, *Great Orm of Loch Ness*, 30–31.
- 47 Spicer, letter to the editor.
- 48 Gould, *Loch Ness Monster*, 46.
- 49 Shine, *Loch Ness*, 7.
- 50 Adrian Shine, e-mail to James Loxton (*Junior Skeptic* research assistant), June 22, 2006.
- 51 Gould, *Loch Ness Monster*, 26.
- 52 Denis Lyell, letter to the editor, *Scotsman*, April 30, 1938, 17.
- 53 "Loch Ness Monster: The Plesiosaurus Theory," *Scotsman*, October 17, 1933, 9.
- 54 "Loch Ness 'Monster': Ship Captain's Views on Occurrence."
- 55 Duke of Portland, letter to the editor, *Scotsman*, October 20, 1933, 11.
- 56 Gould, *Loch Ness Monster*, 30.
- 57 Amy Willis, "Loch Ness Monster: The Strangest Theories and Sightings," August 26, 2009, *Telegraph* (London), <http://www.telegraph.co.uk/news/newstopics/howaboutthat/6095673/Loch-Ness-Monster-the-strangest-theories-and-sightings.html> (accessed June 28, 2010).
- 58 See, for example, Henry Bauer, *The Enigma of Loch Ness: Making Sense of a Mystery* (Urbana: University of Illinois Press, 1986), 51; and Binns, *Loch Ness Mystery Solved*, 50–51. In addition, in early 2010 I made my own failed attempt to locate the story using the searchable "ProQuest Historical Newspapers" archive and other newspaper archives.
- 59 Bauer, *Enigma of Loch Ness*, 159.
- 60 Charles Thomas, "The 'Monster' Episode in Adomnan's *Life of St. Columba*," *Crypto-zoology* 7 (1988): 40–41. The Latin in the original article has been omitted.

- 61 Ibid., 40.
- 62 Ibid., 43.
- 63 Ibid., 44.
- 64 Robert Bakewell, *Introduction to Geology* (New Haven, Conn.: Howe, 1833), 213.
- 65 Philip Henry Gosse, *The Romance of Natural History* (London: Nisbet, 1861), 357–360. Gosse, it should be noted, is best known for his book *Omphalos: An Attempt to Untie the Geological Knot* (London: Van Voorst, 1857), which underlies much of creationist thinking to this day.
- 66 *Elasmosaurus* was a plesiosaur with an exceptionally long neck that lived in the late Cretaceous period (98–65 million years ago). After lopping off the top of the elasmosaur's head with a machete, the hero bizarrely—and successfully—transplants a young companion's brain into the beast. Eventually, its human intelligence fading, the creature (I can't help but think of it as "Elasmosaurenstein") turns on the protagonist and devours him. See Wardon Allan Curtis, "The Monster of Lake LaMetrie" (1899), Gutenberg Consortia Center, <http://ebooks.gutenberg.us/WorldeBookLibrary.com/lametrie.htm> (accessed September 12, 2011).
- 67 Arthur Conan Doyle, *The Lost World* (1912), Gutenberg Consortia Center, <http://www.gutenberg.org/files/139/139-h/139-h.htm> (accessed September 12, 2011).
- 68 Rupert T. Gould, *The Case for the Sea-Serpent* (London: Allan, 1930; New York: Putnam, 1934).
- 69 Quoted in Binns, *Loch Ness Mystery Solved*, 25–26.
- 70 Ibid., 24.
- 71 Philip Stalker, "Loch Ness Monster: A Puzzled Highland Community," *Scotsman*, October 16, 1933, 11.
- 72 Philip Stalker, "Loch Ness Monster: The Plesiosaurus Theory," *Scotsman*, October 17, 1933, 9.
- 73 Alex Campbell to Ness Fishery Board, October 28, 1933, quoted in Gould, *Loch Ness Monster*, 110–112.
- 74 Quoted in Dinsdale, *Loch Ness Monster*, 126.
- 75 Binns, *Loch Ness Mystery Solved*, 79–80.
- 76 Stalker, "Loch Ness Monster: The Plesiosaurus Theory," 9.
- 77 F. W. Memory, "The Monster Is a Seal: Conclusions of the 'Daily Mail' Mission," *Daily Mail* (London), ca. December 18, 1933–January 19, 1934, undated clipping, Loch Ness and Morar Project Archive, [http://www.lochnessproject.org/adrian\\_shine\\_archive/room/paperspdfs/LOCH\\_NESS\\_1933damail.pdf](http://www.lochnessproject.org/adrian_shine_archive/room/paperspdfs/LOCH_NESS_1933damail.pdf) (accessed October 10, 2011).
- 78 Rupert Gould, "The Loch Ness 'Monster': A Survey of the Evidence," *Times*, December 9, 1933, 13.
- 79 "The Monster of Loch Ness: New Accounts from Eye-witnesses," *Times*, December 18, 1933, 9.
- 80 Douglas Russell, letter to the editor, *Scotsman*, October 20, 1933, 15.
- 81 Nicholas Witchell, *The Loch Ness Story* (Harmondsworth: Penguin, 1975), 72.
- 82 *Daily Express* (Glasgow), December 16, 1933, 8.
- 83 *Daily Express*, May 10, 1934, 6; "Trips to See the 'Monster,'" *Scotsman*, October 31, 1933.
- 84 "Buses to the 'Monster,'" *Scotsman*, March 10, 1934, 11.



- 85 "I'm the Monster of Loch Ness" (sung by Leslie Holmes in a British Pathé film released on January 25, 1934), British Pathé, <http://www.britishpathe.com/record.php?id=28215> (accessed June 1, 2010).
- 86 "Loch Ness in the Films," *Scotsman*, December 11, 1934, 8.
- 87 *Daily Express*, November 13, 1933, 10; September 3, 1934, 20; January 25, 1934, 7.
- 88 "Sandy, the Loch Ness Monster," *Times*, January 30, 1934, 12.
- 89 *Daily Express*, January 9, 1934, 11.
- 90 *Scotsman*, February 28, 1934, 14.
- 91 Dennis Dunn, "Monster Bobs Up Again . . . Hotels Doing Fine," *Daily Express*, April 24, 1934, 3.
- 92 *Scotsman*, December 16, 1950, 6.
- 93 Steuart Campbell, *The Loch Ness Monster: The Evidence* (Amherst, N.Y.: Prometheus, 1997), 37–38.
- 94 Gould, *Loch Ness Monster*, 23.
- 95 Elwood Baumann, *The Loch Ness Monster* (New York: Franklin Watts, 1972), 12.
- 96 Roy P. Mackal, *The Monsters of Loch Ness* (Chicago: Swallow Press, 1976), 95–96.
- 97 Campbell, *Loch Ness Monster*, 38.
- 98 Mackal, *Monsters of Loch Ness*, 95.
- 99 Holiday, *Great Orm of Loch Ness*, 26.
- 100 Mike Dash, "Frank Searle's Lost Second Book," December 27, 2009, *Dry as Dust: A Forfeitan in the Archives*, Charles Fort Institute, [Blogs.fortean.org/node/95](http://blogs.fortean.org/node/95) (accessed July 4, 2010).
- 101 Quoted in Holiday, *Great Orm of Loch Ness*, 26–27.
- 102 Mackal, *Monsters of Loch Ness*, 95.
- 103 Quoted in "Mr. Wetherell and a Broadcast," *Daily Express*, December 23, 1933.
- 104 Binns, *Loch Ness Mystery Solved*, 28.
- 105 Quoted in "Hunter's Story of Finding of Spoor," *Scotsman*, December 26, 1933, 10.
- 106 Strix [Peter Fleming], *Spectator*, April 5, 1957, quoted in Binns, *Loch Ness Mystery Solved*, 28–29.
- 107 David Martin and Alastair Boyd, *Nessie: The Surgeon's Photograph Exposed* (London: Thorne, 1999), 34.
- 108 "Monster Mystery Deepens," *Daily Mail*, January 4, 1934.
- 109 Martin and Boyd, *Nessie*, 27.
- 110 The "Surgeon's Photograph" is really two photographs: the famous image and a less impressive image said to show the creature diving. Cryptozoologists criticize skeptics for concentrating on the famous image and ignoring the second, but I will also follow that pattern. In my opinion, the second photo offers little to no additional information. It is consistent with the same model sinking or tipping over or with another object—but the image is too poor to answer for itself.
- 111 Mackal, *Monsters of Loch Ness*, 98.
- 112 Roy Chapman Andrews, *This Business of Exploring* (New York: Putnam, 1935), 59–60.
- 113 "The Making of a Monster," *Sunday Telegraph* (London), December 7, 1975, 6, quoted in Martin and Boyd, *Nessie*, 14.
- 114 Martin and Boyd, *Nessie*, 17.

- 115 Quoted in *ibid.*, 20.
- 116 Robert Kenneth Wilson to Constance Whyte, 1955, quoted in *ibid.*, 62.
- 117 Robert Kenneth Wilson to Maurice Burton, April 27, 1962, quoted in *ibid.*, 57.
- 118 Major Egginton to Nicholas Witchell, November 3, 1970, quoted in *ibid.*, 68–69.
- 119 *Ibid.*, 50.
- 120 Nicholas Witchell, *The Loch Ness Story: Revised and Updated Edition* (London: Corgi, 1991), 47.
- 121 Martin and Boyd, *Nessie*, 77.
- 122 Major Egginton to Nicholas Witchell, November 9, 1970, quoted in *ibid.*, 72.
- 123 Quoted in *ibid.*, 70.
- 124 Denise Wilson to Tim Dinsdale, 1979, quoted in *ibid.*, 58.
- 125 Quoted in *ibid.*, 59.
- 126 Quoted in *ibid.*, 77–78.
- 127 *Ibid.*, 83; Paul H. LeBlond and M. J. Collins, “The Wilson Nessie Photograph: A Size Determination Based on Physical Principles,” *Scottish Naturalist* 100 (1988): 95–108.
- 128 Quoted in Benjamin Radford and Joe Nickell, *Lake Monster Mysteries: Investigating the World’s Most Elusive Creatures* (Lexington: University Press of Kentucky, 2006), 17.
- 129 Witchell, *Loch Ness Story*, 75–77.
- 130 Quoted in *ibid.*
- 131 Witchell, *Loch Ness Story: Revised*, 82–83. The man who Stuart took to see the props is identified by Witchell as “another Loch Ness resident, who is known to me and with whom I confirmed the following details.” His name is revealed as Richard Frere in Campbell, *Loch Ness Monster*, 44.
- 132 Mackal, *Monsters of Loch Ness*, 102.
- 133 Quoted in Radford and Nickell, *Lake Monster Mysteries*, 19.
- 134 Mackal, *Monsters of Loch Ness*, 13.
- 135 Dinsdale, *Loch Ness Monster*, 5–6.
- 136 *Ibid.*, 81.
- 137 *Ibid.*, 82.
- 138 *Ibid.*, 95–96.
- 139 *Ibid.*, 100.
- 140 *Ibid.*, 104.
- 141 *Ibid.*, 110.
- 142 *Ibid.*
- 143 Mavis Cole, “Summer’s Here and Britain Sees Loch Ness Monster,” *Chicago Daily Tribune*, June 14, 1960, B6.
- 144 Donald White, “The Great Monster Hunt,” *Boston Globe*, December 6, 1970, G57.
- 145 Tim Dinsdale, *Project Water Horse* (London: Routledge and Kegan Paul, 1975), 159–160.
- 146 White, “Great Monster Hunt.”
- 147 Dinsdale, *Project Water Horse*, 11.
- 148 A detailed discussion of the analysis of the film is in Binns, *Loch Ness Mystery Solved*, 107–125. See also “Photographic Interpretation Report: Loch Ness,” in “Did Tim Dinsdale Film Nessie?” Cryptozoo-oscity, <http://cryptozoo-oscity.blogspot.com/2010/05/did-tim-dinsdale-film-nessie.html> (accessed September 14, 2010).

- 149 "The Dinsdale Film," <http://henryhbauer.homestead.com/DinsdaleFilm.html> (accessed September 14, 2010).
- 150 Shine, *Loch Ness*, 12.
- 151 Binns, *Loch Ness Mystery Solved*, 121.
- 152 *Ibid.*, 108.
- 153 Quoted in Henry Allen, "On the Monster Trail," *Washington Post*, April 16, 1972, E9.
- 154 Dinsdale, *Project Water Horse*, 154–155.
- 155 *Ibid.*, 6–7.
- 156 Quoted in Allen, "On the Monster Trail."
- 157 Tony Harmsworth, "Tim Dinsdale's Loch Ness Monster Film," Loch Ness Information, <http://www.loch-ness.org/filmandvideo.html> (accessed September 16, 2010).
- 158 Loren Coleman and Patrick Huyghe, *The Field Guide to Lake Monsters, Sea Serpents, and Other Mystery Denizens of the Deep* (New York: Penguin / Tarcher, 2003), 21.
- 159 Dunn, "Monster Bobs Up Again."
- 160 Dinsdale, *Loch Ness Monster*, 13.
- 161 Loren Coleman, "Why Do Plesiosaurs Have Long Necks?" September 2, 2009, Cryptomundo, <http://www.cryptomundo.com/cryptozoo-news/plesiosaurs-necks/> (accessed June 23, 2010).
- 162 Loren Coleman and Jerome Clark, *Cryptozoology A to Z: The Encyclopedia of Loch Monsters, Sasquatch, Chupacabras, and Other Authentic Mysteries of Nature* (New York: Simon and Schuster / Fireside, 1999), 140.
- 163 Michael Thompson-Noel, "The Day I Saw Five Loch Ness Monsters," *Financial Times* (London), September 13, 1997, 17.
- 164 Bernard Heuvelmans, "Review of the Monsters of Loch Ness," *Skeptical Inquirer* 2, no. 1 (1977): 110.
- 165 Karl Shuker, *The Beasts That Hide from Man: Seeking the World's Last Undiscovered Animals* (New York: Paraview Press, 2003), 187.
- 166 Dinsdale, *Loch Ness Monster*, 232–233.
- 167 Shine, *Loch Ness*, 26.
- 168 Adrian J. Shine, "Postscript: Surgeon or Sturgeon?" *Scottish Naturalist* 105 (1993): 271–282.
- 169 Bauer, *Enigma of Loch Ness*, 56.
- 170 Mackal, *Monsters of Loch Ness*, 200–201.
- 171 Dinsdale, *Loch Ness Monster*, 81–82.
- 172 John Kirk, *In the Domain of the Lake Monsters* (Toronto: Key Porter Books, 1998), 115, 119.
- 173 Mackal, *Monsters of Loch Ness*, 29.
- 174 Bentley Murray, letter to the editor, *Scotsman*, October 30, 1933, 13.
- 175 A. T. C., letter to the editor, *Scotsman*, November 4, 1933, 15.
- 176 "Loch Ness Monster Theory," *Inverness Courier*, September 5, 1933.
- 177 "The Loch Ness 'Monster': Is It a Giant Eel?" *Inverness Courier*, September 15, 1933.
- 178 W. P., letter to the editor, *Scotsman*, November 2, 1933, 11.
- 179 Alan MacLean, letter to the editor, *Scotsman*, November 16, 1933, 11.
- 180 John Moir, letter to the editor, *Scotsman*, November 6, 1933, 13.
- 181 Holiday, *Great Orm of Loch Ness*.

- 182 Joe Nickell, "Lake Monster Lookalikes," June 2007, Committee for Skeptical Inquiry, [http://www.csicop.org/sb/show/lake\\_monster\\_lookalikes/](http://www.csicop.org/sb/show/lake_monster_lookalikes/) (accessed September 10, 2010).
- 183 This effect has often been disputed by cryptozoology enthusiasts, but it certainly happens. See, for example, Loren Coleman, "Real Otter Sense," June 16, 2007, CryptoMundo, <http://www.cryptomundo.com/cryptozoo-news/real-otter-sense/> (accessed September 10, 2010).
- 184 Otters have, for example, been filmed at the loch by longtime Nessie researcher Dick Raynor, as he reported in "Otters in Loch Ness," Loch Ness Investigation, <http://www.lochnessinvestigation.com/otters.htm> (accessed April 10, 2012).
- 185 Mackal, *Monsters of Loch Ness*, 136.
- 186 Gould, *Loch Ness Monster*, 74.
- 187 Binns quotes an article from the *Inverness Courier*, but seems not to provide a citation for it, in *Loch Ness Mystery Solved*, 20.
- 188 Campbell, "Strange Spectacle on Loch Ness."
- 189 "Loch Ness 'Monster' Again," *Inverness Courier*, June 9, 1933.
- 190 Gould, *Loch Ness Monster*, 142.
- 191 Because the word "porpoise" has both formal and informal meanings, it is not clear what type of animals are described in this story. They may have been true porpoises, or they could just as well have been dolphins. See "Captured by Nature," *Daily Mail*, September 16, 1914, 3.
- 192 Gordon Williamson, "Seals in Loch Ness," *Scientific Reports of the Whales Research Institute*, no. 39 (1988): 151-157.
- 193 Dick Raynor, "Seal in Urquhart Bay, 1999," Loch Ness Investigation, <http://www.lochnessinvestigation.com/Seals.html> (accessed June 25, 2010).
- 194 Dick Raynor, "What do you think of Dr. Rines and his ideas of tracking and filming a moving object in the loch?" Loch Ness Investigation, <http://www.lochnessinvestigation.com/cyberspace.html> (accessed June 25, 2010).
- 195 "The 'Monster'—Scientists' Views After Seeing Film," *Scotsman*, October 5, 1934, 9.
- 196 "Film That 'Removes Doubt' to Be Shown in Scotland," *Scotsman*, November 3, 1936, 10. This appears to contradict a quote from Irvine, not clearly sourced, that the creature had "a huge body . . . over 30 feet long" (quoted in Witchell, *Loch Ness Story*, 52-53).
- 197 "The Monster of Loch Ness: New Accounts from Eye-witnesses," *Times*, December 18, 1933, 9.
- 198 Quoted in F. W. Memory, "The 'Monster' Again: New Support for Seal Theory," *Daily Mail*, ca. December 18, 1933-January 19, 1934, undated clipping, Loch Ness and Morar Project Archive, [http://www.lochnessproject.org/adrian\\_shine\\_archiveroom/paperspdfs/LOCH\\_NESS\\_1933damail.pdf](http://www.lochnessproject.org/adrian_shine_archiveroom/paperspdfs/LOCH_NESS_1933damail.pdf) (accessed January 13, 2012).
- 199 Quoted in F. W. Memory, "There Is a Seal in Loch Ness," *Daily Mail*, ca. December 18, 1933-January 19, 1934, undated clipping, Loch Ness and Morar Project Archive, [http://www.lochnessproject.org/adrian\\_shine\\_archiveroom/paperspdfs/LOCH\\_NESS\\_1933damail.pdf](http://www.lochnessproject.org/adrian_shine_archiveroom/paperspdfs/LOCH_NESS_1933damail.pdf) (accessed January 13, 2012).

- 200 Compare “What Was It? A Strange Experience on Loch Ness,” *Northern Chronicle*, August 27, 1930, with Gould, *Loch Ness Monster*, 37–38.
- 201 Quoted in Witchell, *Loch Ness Story*, 29–30.
- 202 It is interesting to note, however, that those who claim to have been abducted by aliens are more prone than control subjects to form false memories in a laboratory setting. See Susan A. Clancy, Richard J. McNally, Daniel L. Schacter, Mark F. Lenzenweger, and Roger K. Pitman, “Memory Distortion in People Reporting Abduction by Aliens,” *Journal of Abnormal Psychology* 111 (2002): 455–461.
- I know of no similar research involving people to claim to have seen cryptids, but it is intriguing to speculate that this population might also exhibit increased vulnerability to false memories. In either event, a significant rate of false memory is common to us all.
- 203 “Sea Serpent in the Highlands.”
- 204 Mackal, *Monsters of Loch Ness*, 99. The claim of twenty-one photographs conflicts with news reports at the time, such as “Five Photographs Secured by Searchers—Seen 21 Times,” *Scotsman*, August 9, 1934, 9. However, Mackal claims to have examined all twenty-one photographs from Mountain’s expedition.
- 205 Binns, *Loch Ness Mystery Solved*, 37–38.
- 206 The Loch Ness Phenomena Investigation Bureau (LNPIB; now Loch Ness Investigation Bureau [LNIB]) was formed in 1962, and Adrian Shine says that its camera surveillance began the same year. See “Loch Ness Timeline,” Loch Ness and Morar Project, [http://www.lochnessproject.org/adrian\\_shine\\_archiveroom/loch\\_ness\\_archive\\_timeline.htm](http://www.lochnessproject.org/adrian_shine_archiveroom/loch_ness_archive_timeline.htm) (accessed July 5, 2010). Holiday says that the camera rigs were built for the 1964 season, and mentions earlier work by the LNPIB, in *Great Orm of Loch Ness*, 64–65.
- 207 Holiday, *Great Orm of Loch Ness*, 65–67.
- 208 Mackal, *Monsters of Loch Ness*, 200.
- 209 *Ibid.*, 45–48.
- 210 Dick Raynor, “Submarine Investigations,” Loch Ness Investigation, [www.lochnessinvestigation.org/Subs.html](http://www.lochnessinvestigation.org/Subs.html) (accessed July 3, 2010).
- 211 Rikki Razdan and Alan Kielar, “Sonar and Photographic Searches for the Loch Ness Monster: A Reassessment,” *Skeptical Inquirer* 9, no. 2 (1984–1985): 153–154. Based on the shape of the fin, Sir Peter Scott, a noted naturalist and a co-founder of the Loch Ness Phenomena Investigation Bureau, gave the creature the scientific name *Nessiteras rhombopteryx* (monster of Ness with the diamond-shaped fin) so it could be registered as an endangered species. See Peter Scott and Robert Rines, “Naming the Loch Ness Monster,” *Nature* 258, no. 5535 (1975): 466–468. But it was soon pointed out that the name can be anagrammed into “monster hoax by Sir Peter S,” as reported in “Loch Ness Monster Shown a Hoax by Another Name,” *New York Times*, December 19, 1975, 78. To counter this insinuation with another anagram, Rines “came up with the antidote—‘Yes, both pix are monsters—R’” (Dinsdale, *Loch Ness Monster*, 171).
- 212 *Mysteries of the Unknown: Mysterious Creatures* (Alexandria, Va.: Time-Life Books, 1988), 73.

- 213 Campbell, *Loch Ness Monster*, 67.
- 214 Harmsworth, *Loch Ness, Nessie and Me*, 181.
- 215 Witchell, *Loch Ness Story: Revised*, 165.
- 216 Campbell, *Loch Ness Monster*, 72–74.
- 217 Witchell, *Loch Ness Story: Revised*, 168.
- 218 Gould, *Loch Ness Monster*, 120.
- 219 Binns, *Loch Ness Mystery Solved*, 35.
- 220 David S. Martin, Adrian J. Shine, and Annie Duncan, “The Profundal Fauna of Loch Ness and Loch Morar,” *Scottish Naturalist* 105 (1993): 119.
- 221 “Nessie Dead or Alive,” Loch Ness and Morar Project, [http://www.lochnessproject.org/loch\\_ess\\_reflections\\_news\\_links/loch\\_ess\\_traps.htm](http://www.lochnessproject.org/loch_ess_reflections_news_links/loch_ess_traps.htm) (accessed July 5, 2010).
- 222 Quoted in Holiday, *Great Orm of Loch Ness*, 201.
- 223 Binns, *Loch Ness Mystery Solved*, 148–149.
- 224 Shine, “Loch Ness Timeline.”
- 225 Quoted in “BBC ‘Proves’ Nessie Does Not Exist,” July 27, 2003, BBC News, <http://news.bbc.co.uk/2/hi/science/nature/3096839.stm> (accessed July 5, 2010).
- 226 Karen DeYoung, “Sonar Search for ‘Nessie’ Reveals 3 Wobbly Scratches,” *Washington Post*, October 12, 1987, A1.
- 227 For a thorough discussion, see Adrian J. Shine and David S. Martin, “Loch Ness Habitats Observed by Sonar and Underwater Television,” *Scottish Naturalist* 100 (1988): 111–199.
- 228 Ibid.
- 229 Dick Raynor, “The River Ness—From Loch Ness to the Sea,” Loch Ness Investigation, <http://www.lochnessinvestigation.org/RiverNessJourney.html> (accessed September 19, 2010).
- 230 Quoted in “Commander Gould to Investigate,” *Scotsman*, November 10, 1933, 11.
- 231 Meurger and Gagnon, *Lake Monster Traditions*, 135–139.
- 232 Mackal, *Monsters of Loch Ness*, 25.
- 233 Shine and Martin, “Loch Ness Habitats Observed by Sonar and Underwater Television.”